

AMERICAN
RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

SATURDAY, OCTOBER 16, 1858.

Second Quarto Series, Vol. XIV., No. 42.---Whole No. 1,174, Vol. XXXI.

ESTABLISHED IN 1831.

NEW-YORK:

PUBLISHED WEEKLY, BY

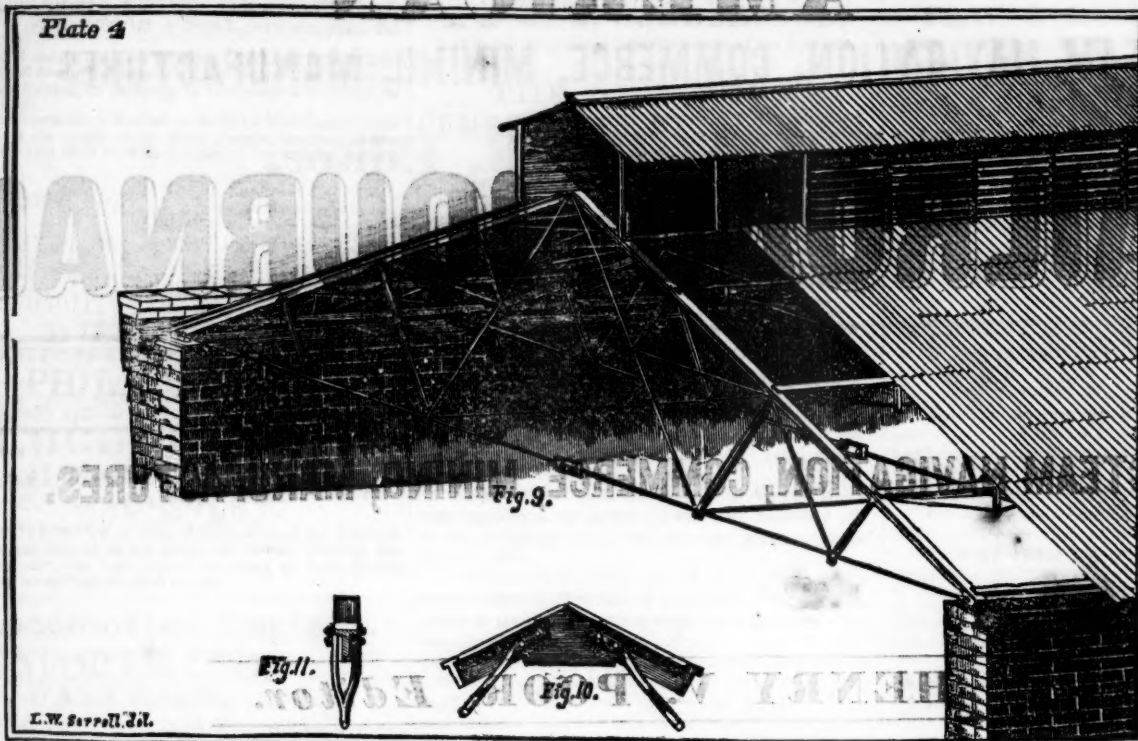
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ROOFING.

Plate 4



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Fig. 6.



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Fig. 7.



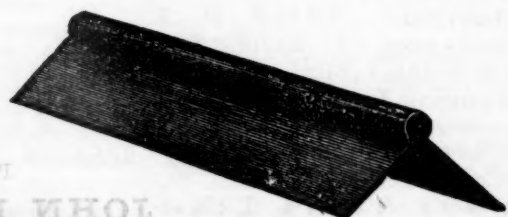
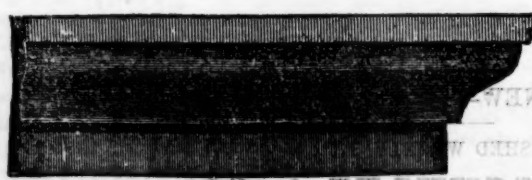
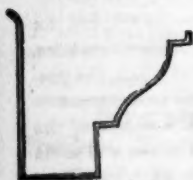
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Fig. 8.



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MARSHALL LEFFERTS & BROTHER,
No. 57 Beekman st., NEW YORK.

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SECOND QUARTO SERIES, VOL. XIV., No. 42.]

SATURDAY, OCTOBER 16, 1858.

[WHOLE No. 1,174, VOL. XXXI.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, October 16, 1858.

British Provinces in America, and their Railroads.

(Editorial Correspondence of the R. R. JOURNAL.)
LONDON, September 22nd, 1858.

Several matters of late have caused their North American Colonies to be regarded with more than ordinary interest by the British public. Among these may be named the closing of the Hudson Bay Company, the gold discoveries on Fraser's River, and the political condition of the Provinces which seem to point to some movement having for its object their confederation. Growing out of these questions is a great railway scheme, which is no less than that of a line from the Atlantic to the Pacific "entirely through British territory." Such a scheme, to say the least, is very well received here, and vigorous efforts will be made to carry it out.

The plan revives the long talked-of project of a railroad from Halifax to Quebec. From the latter place to Montreal, a railroad is already built. The proposed Pacific line then follows up the Ottawa, skirting the north shore of Lake Superior, whence it strikes off into the valley of Lake Winnipeg. It then takes the route of the Saskatchewan River to the Rocky Mountains, which are to be crossed through some unknown pass, the practicability of

which is assumed, and thence to Fraser's River, or to some point on Puget Sound.

This scheme is very attractive to Englishmen who are not very fond of sharing their mess with others. In reply to the question—"why not take a portion of the line through the territory of the United States where a much more favorable route can be found?" The reply is, "it must be a line for military, as well as commercial purposes, and must, consequently, be entirely within our own territory, and so far from the frontier as to be capable of maintenance and defense." This is the conviction and reasoning of the leading minds here, especially of the peculiar champions of the Provinces, of parties who have done the most towards abrogating the claims of the Hudson Bay Company, and who compose the *avant garde* of the radical reformers.

To any but a thorough John Bull, nothing can exceed the puerility and preposterousness of such a scheme and such views. In the first place, a railroad cannot be built around the north shore of Lake Superior, unless the Home Government will vouchsafe to it the Imperial revenues for two or three years. In the next place, all the standing armies in christendom could not, in the event of a war, maintain the communication over it uninterrupted. Every bridge culvert would be at the mercy of any person who could carry a cask of gun powder on his back. Above all, in case of war between the United States and England, the former would not be long in helping themselves to whatever possessions and property the latter might have left to them on American soil. But to all such considerations a genuine Englishman is blind. He is governed by maxims and traditions which he has gained in his intercourse with the nations of the old world, and cannot except from their application the people of the new.

In this connection I will take occasion to say a word in reference to the proposed confederation of the British North American Provinces. Its object, here at least, is twofold—to quiet the conflicts that are perpetually arising between the two races and the two Provinces of Canada, and as the *Times* newspaper recently stated in an elaborate article, "to erect a barrier to the ambitious and aggressive policy of the United States." Canada, always restless and turbulent, was never more so than at

the present time. We think, however, it will require a heavier *dray* than the light one of the Lower Provinces to give regularity to its action. Confederation would, perhaps, give predominance to the English element, without rendering the French more tractable. But all plans for a union must be regarded as far-fetched and absurd, especially since the treaty of reciprocity with the United States. Hardly the slightest commercial or personal intercourse exists between the Canadas, and New Brunswick and Nova Scotia. No tie of interest whatever connects them. In fact, the interests of the Lower Provinces are entirely against the consolidation proposed, provided it should interfere in the slightest degree with their relations to the United States. It would, undoubtedly, most materially interfere, for it is not at all likely that the latter would see a confederation framed to resist their "ambition and aggression," without putting such confederation in position equal to that of the "most favored nation," instead of treating the members of it, as they now do, as far as commerce is concerned, as one of the sister States. When such an alternative is presented, no representation, either on the part of Canada or the home government would have the least influence over the Lower Provinces, as they would not sacrifice to an *ideal* nationality their present enviable commercial position, which gives them free access to the markets of both countries. The plans for nationalizing the Provinces, and for the construction of a great national highway to the Pacific, entirely through British territory, will, I fear, fall to the ground together.

As compared with continental Europe, England is a shining light; but in spite of her free institutions, and her extended commerce, it is hard for her people to divest themselves of their prejudices, and a certain national rigidity of mind, the possession of which renders them the most *uncosmopolitan* people in the world. The people of the United States would be delighted to see a "Pacific Railroad" constructed entirely through "British" territory, and would patronize it with as much freedom and satisfaction as one through their own. They would be entirely satisfied with a cheap and rapid means of conveyance, no matter through whose soil. If the road should prove unproductive, they would enjoy the trip all the more, from

the consciousness that they were being accommodated at another's expense. In America, where there is no power to challenge entire freedom of action, not hostile to our religious and social ideas and organizations, we have little conception of the jealousies of the old world, which are but the memories of past conflicts, which make up the histories of their intercourse. With Americans, any person who will lend a hand toward subduing a continent, and fitting it for the abode of civilized man, is received with an open palm. He wants no other title to respect or favor. But should he spend the greater part of his time and money upon works of self-defense, when, with good behavior, every one would be his friend, he would be looked upon as having a very soft spot in his head. The people of the United States are always pleased to see John Bull spending money on their continent, and would be delighted to see a dozen railroads to the Pacific entirely through his territory, and use them too; but this does not justify the undertaking on his part, of works which can only end in disaster, and the ill success of which may discourage him from helping to construct such as are really practicable and useful.

Should a railroad to the Pacific, partly through British territory, prove practicable, it must be based upon the railroads of the Northwestern American States. At present, St. Paul, the capital of Minnesota, is probably the best point for commencing. The line would thence take a north-westerly direction through the valley of Red River, thence striking into the valley of the Assinaboine, thence into the valley of the Saskatchewan. Such a route would, undoubtedly, pass through a fine territory, having a good climate. The practicability of crossing the Rocky Mountains, and of constructing a road between them and the Pacific, must yet be considered as an unsolved problem. Should the report of the discoveries of gold on Fraser's River be fully confirmed, a large overland emigration will, the coming season, take the route described, and the country and its capabilities will soon become better known. This emigration will have another effect of settling the Hudson Bay question. It would soon render a considerable portion of the territory claimed by it worthless for furs, and would end by the establishment of large settlements throughout the valleys of the Red, Assiniboine, and Saskatchewan Rivers.

For reasons already given, the old scheme of the Halifax and Quebec Railroad is still warmly encouraged here, independent of its connection with a Pacific Railroad. No less a celebrity than Mr. Roebuck, strenuously advocates it. He takes the general ground that, at the present time, a large portion of British merchandise going to the Canadas, and passing through the United States, pays full duties into the United States Treasury. To avoid such onerous burdens he is the earnest advocate of the Halifax and Quebec line! He seems to be entirely ignorant of the fact that, for years, British goods pass through the United States to Canada, *in bond*, without the charge of a penny by the American Government. I might almost say that this is a fair specimen of the accuracy of the knowledge of British statesmen upon American affairs. The English people, proverbially inquisitive, stand in reference to the United States, and to their own colonies, in the position of a pa-

rent, whom age, a comfortable amount of this world's goods, and a good degree of immobility, have rendered completely indifferent to anything not immediately within the circle of his daily duties and experience. His children, on the contrary, never lose their interest in the old homestead, but treasure up all their recollections of it, which they keep fresh and bright by carefully informing themselves as to everything that is taking place in it, and all the changes it may undergo. In reference to the line last named, Mr. Roebuck also advocates it for its military uses. There is, in fact, a strong disposition here to preserve to the Canadas a distinct nationality, in a sort of virgin purity, modeled, as far as possible, upon the original of the mother country. Above all, there is a wish here to save it from contamination and debauch by too close a contact with Brother Jonathan, a rough, unseasonable and uncereemonious fellow, whom John Bull is trying hard to accept and love—through his reason, however, rather than his heart. But to go from one thing to another, it is a remarkable fact that in all the British colonies, there is not, in their political organizations, the slightest disposition to repeat the political and social distinctions, which are so many castes, of the mother country. The logic of the British mind is against them, and where it can have free play, abolishes them altogether. All the British colonies left to themselves would adopt the United States as their model, and in their legislation repeat their history.

Report on the Condition of the Atlantic Telegraph Cable.

At length we have something official and intelligible in relation to the condition of the Atlantic Cable. Mr. VARLEY, "the Electrician of the Electric and International Telegraph Company"—so he is styled by the company—has made the following report on the state of the cable as observed by him on the 6th, 7th, 8th, 9th, and 10th of September:

LONDON, September 18, 1858.

To the Chairman and Directors of the Atlantic Telegraph Company:

I arrived at Valentia on the evening of the 5th instant, when I found that no words had for many days been received through the cable from Newfoundland.

On the 6th, 7th, 8th, 9th, and 10th I tested the cable at intervals, in four different ways, to ascertain its condition. The following are the results:

1. There is a fault of great magnitude at a distance of between 245 and 300 statute miles from Valentia, but the locality cannot be more accurately ascertained until a portion of the cable, 20 or 30 miles in length, has been tested against my standard of resistance, and until the log has been consulted to ascertain the amount of slack paid out. I would suggest that the piece of cable at Greenwich be carefully measured and tested against my standard, in order to obtain the most correct estimate of the distance of the fault. Assuming, however, that it is 270 miles, and allowing 22 per cent. for slack, it is possible the chief defect is in shallow water—410 fathoms.

2. The copper wire at the faulty place above alluded to, does not touch the iron covering of the cable, as is proved by its forming a voltaic element, which gives rise to a continuous positive current from the copper wire, varying very little in tension.

3. The insulation of the wire between Valentia and the fault is perfect, or at least contains no defect of sufficient importance to be perceptible, or to materially influence the working were the cable otherwise perfect.

4. The copper wire is continuous, and consequently the cable has not parted. Faint signals or reversals are still received from Newfoundland, but the power used will shortly eat away the exposed copper wire in the faulty place by electrolytic decomposition.

The actual resistance of the fault appears to be at least equal to ten miles of the cable, but is most probably greater.

Taking it at its lowest resistance, viz., 10 miles, and assuming that Newfoundland is only using 180 cells of Daniel's battery, the strongest current received thence during my stay was only 1-24th part of the force that it should be were there but this one fault. When it is, however, borne in mind that on the other side they are probably using more power, and also that the defect first alluded to probably offers more resistance than that assumed, viz., ten miles, it is evident that there is another and more distant fault, the approximate locality of which I could not pretend to estimate at this end without being able to speak to Newfoundland.

From authentic data shown to me at Valentia, I am of opinion that there was a fault on board the Agamemnon, before the cable was submerged, at a distance of about 560 miles from one end, and 640 from the other.

The following are the data in question, but on what occasion they were obtained I am unable to state. They were, however, probably taken when the ships were at Queenstown:

Testing of Coils on Board the Agamemnon, Consisting of About 1,200 Statute Miles of Cable.

1. When the upper end was disconnected the current entering the cable from a battery was..... 8.5 parts.
2. When the upper end was put to the earth the current entering the cable was..... 10.5 "
3. Current going out of the upper end of the cable to the earth..... 6 "
4. When the lower end was disconnected the current entering the cable was..... 8.5 "
5. When lower end was to the earth..... 10.5 "
6. Current going out of the upper end of the cable to the earth..... 4.5 "

showing that if there were a fault it was nearer to the upper end, but not far from the middle of the coil.

When 200 miles had been removed from one end of the coil, (but from which end I am not at present aware,) leaving 1,000 miles, the amounts were—

- | | |
|-------------------|-------------------|
| 1..... 7.5 parts. | 4..... 8.5 parts. |
| 2..... 10.25 " | 5..... 11.5 " |
| 3..... 6.5 " | 6..... 6.5 " |

indicating that there was a fault, by rough calculation, at about 560 miles from one end and 440 from the other.

With the 200 miles of cable amounts were—

- | | |
|-----------------|---------------|
| 1..... 2 parts. | 4..... parts. |
| 2..... 40 " | 5..... 40.5 " |
| 3..... 39.5 " | 6..... 39.5 " |

Test of the Entire Cable on Board the Agamemnon and Niagara—viz., 2,500 Miles.

BATTERY AT AGAMEMNON END.

1. Current entering the cable, the Niagara end being disconnected..... 45 parts.
2. Niagara end to earth..... 49½ "
3. Current flowing out at Niagara end to earth..... 15½ "

BATTERY AT NIAGARA END.

4. Current entering the cable, the Agamemnon end being disconnected..... 25½ parts.
5. Agamemnon end to earth..... 37 "
6. Current flowing out at Agamemnon end to earth..... 14 "

indicating considerable leakage on board of the Agamemnon.

I am also informed that the currents through the cable, even immediately after it was submerged, were so weak that relays were useless, and that not one perfect message was recorded by them,

everything that was received being read from the deflections of a galvanometer.

By comparing the above data with those of the new cable now making by Messrs. Glasse & Elliott for the Electric and International Telegraph Company, the amount of current which entered the 1,000 miles of cable when disconnected at one end should not have exceeded 2 or 2.5 parts, instead of 7.5 and 8.5 parts.

The inference by rough calculation, therefore, is that there was a fault offering a resistance equal to 1,000 or 1,200 miles of cable, situated at a distance about 560 miles from one end of the 1,200 mile coil on board the Agamemnon.

This, however, cannot be the fault first alluded to, situate at about 270 miles from Valentia, but may have been the one which caused such alarm when the ships were 500 miles from Ireland, and when the signals ceased altogether and never certainly recovered.

It is not at all improbable that the powerful currents from the large induction coils have impaired the insulation, and that had more moderate power been used the cable would still have been capable of transmitting messages.

To satisfy myself on this point, I attached to the cable a piece of gutta-percha covered wire, having first made a slight incision in the gutta-percha to let the water reach the wire; the wire was then bent so as to close up the defect. The defective wire was then placed in a jug of sea water, and the latter connected with the earth. After a few signals had been set from the induction coils into the cable, and consequently into the test wire, the electricity burnt through the incision, rapidly burning a hole nearly one-tenth of an inch in diameter.

When the full force of the coils were brought to bear on the test wire by removing them from the cable and allowing the electricity only one channel, viz., that of the test wire, the discharges, as might be expected, burnt a hole in the gutta-percha under the water half an inch in length, and the burnt gutta-percha came floating up to the surface.

The foregoing experiments prove that when there are imperfections in the insulating covering there is very great danger arising from using such intense currents.

The size of the present conducting strand is too small to have worked satisfactorily, even had the insulations been sound. With a strand of larger dimensions less intense currents would be required, and both speed and certainty increased.

It is not, however, altogether impossible that some intelligible signals may yet be received through the cable, as stated in my previous communication.

C. F. VARLEY,
Electrician of the Electric and International
Telegraph Company.

James River and Kanawha Canal.

The clearances at the Lynceburg Toll Office of the James River and Kanawha Canal during the fiscal year, ending 30th September, 1858, were as follows:

Wheat.....	528,072 bushels.
Flour.....	64,173 barrels.
Leaf Tobacco.....	8,016,447 pounds.
Manufactured Tobacco.....	6,311,145 "
Tobacco Stems.....	1,721,670 "
Copper Ore.....	594,569 "
Bar and Pig Lead.....	951,333 "
Pig Iron.....	2,276 tons.
Wood for Fuel.....	4,457 cords.
Miscellaneous.....	15,000 tons.
Total tonnage for the year.....	56,691 "
Excess of total tonnage over fiscal year—1856 and 1857.....	16,649 "

Antonio and Mexican Gulf Railroad.

The iron for this road has been purchased upon the most favorable terms. Forty-two hundred tons of best quality English iron will be shipped from Cardiff, to be in Port Lavaca on the 1st January, which will build the road including five miles already constructed, fifty miles, which will be completed and in running order by the first of next

June. Parties have also succeeded in negotiating for the iron for the Houston and Brazoria Railroad which will be a continuation of the Tap Road to Columbia, thence to Wharton.

Journal of Railroad Law.

THE HARLEM RAILROAD AGAIN.—THIRD PRELIMINARY INJUNCTION DISSOLVED.

Our readers are very likely tired of this matter, as doubtless the courts are by this time. It comes up, Proteus-like, in every variety of form, and is elastic against all injunctions. In the JOURNAL of August 14th, was given a history of the case, prefatory to Judge HILTON's opinion relative to the power of the city to prohibit the use of steam below Forty-second street. On a similar motion in the U. S. Circuit Court, made a short time after the one last mentioned, a concurrent decision was rendered by Judge NELSON. The action was then brought in the Common Pleas a second time, and in a new form, against the Mayor, etc., of the city of New York and the Harlem Railroad Company, for the purposes stated in the opinion below. The opinion is an elaborate one, and the points decided are entirely different from those discussed on the former motions. As will be seen, it leaves the Common Council free to act on the resolution to rescind the ordinance of 1854 prohibiting the use of steam on Fourth Avenue below Forty-second street.

BRADY, J.—This action was brought for the purpose of perpetually enjoining the Mayor, Aldermen and Commonalty of the City of New York from granting permission to the New York and Harlem Railroad Company, or any other company or person, to run steam engines on Fourth avenue, or on the track of the New York and Harlem Railroad Company, below or south of Forty-second street, or from removing the existing prohibition against doing so, created by resolution approved by the Mayor Dec. 27, 1854, and from repealing that resolution; and also to prevent the New York and Harlem Railroad Company from running or suffering any company or person to run any steam engine upon their track below or south of Forty-second street.

Two questions are presented by this application, which must necessarily be considered and decided:—

First,—Whether the anticipated resolution is legislative in its character; and

Secondly,—Whether the use of steam by the New York and Harlem Railroad Company, in the manner complained of, is authorized by law.

A number of propositions were presented and argued on this motion incidentally bearing on these questions, which, in the consideration of them would be valuable if the authorities to which reference will be made were not conclusive.

In reference to the first question, the act of the Legislature, passed April 25, 1831, incorporating the New York and Harlem Railroad Company, conferred upon that Company power "to construct a single or double railroad or way from any point on the north bounds of Twenty-third street to any point on the Harlem River," between certain specially described boundaries, and "to transport, take and carry property and persons upon the same, by the power and force of steam, of animals, or of any mechanical or other power, or of any combination of them which the said Company may choose to employ," and by the second section of

that act, the location within the prescribed limits was made subject to the approbation of the Common Council of the City of New York.

In addition to this, by the 16th section of the same act, the Corporation of the City of New York were empowered to regulate "the time and manner of using the road, and the speed with which carriages should be permitted to move on the same or any part thereof."

Under and by virtue of that act, the Mayor, Aldermen and Commonalty by ordinance approved December 22, 1831, granted permission to the said Company to construct and lay down in pursuance of their act of incorporation, a railway now used by them, from Twenty-third street to Harlem River.

From this brief statement of the origin of the Company, it will at once be seen that authority emanating from the proper places was given, not only to construct a railroad, but to use steam as a motive power, and that the location of such road having been determined in the manner prescribed by the statute, it became permanent, subject only to the power of the Common Council, to regulate its use as provided by section 16 of the act before mentioned, and their general power over streets, derived from various charters.

The right to use steam, therefore, as a motive power having thus been conferred upon the Company, an ordinance or resolution, determining the point at which it must cease, is not a grant or license, but a mere exercise of the power to regulate.

It grants nothing, and when it limits the use of steam, at any point north of the southern terminus mentioned in the act of incorporation, it restricts the enjoyment of the original grant or franchise. It is said by Judge Hilton (AM. R. R. JOURNAL, August 14th,) that the regulating or legislative power of the Corporation over the streets, which partakes of the character of legislative sovereignty having been originally conferred by the Dongan charter in 1686, and confirmed by the Montgomery charter, and subsequently by legislative grants, it may well be doubted whether the city can be deprived of it, even by an act of the Legislature itself. New York and Harlem Railroad Company vs. the Mayor, etc., Common Pleas. And on this subject see Hoffman's Treatise on Corporations, 42, 62.

I think it thus appears that the resolution which the plaintiffs apprehend would, if passed, be purely legislative in its character, authorized by law, and not subject to the control of the courts. Milbau vs. Sharp, 17 Barber, 438. The People vs. Lowber and the Mayor, etc., opinion of Judge Ingraham.

But if the resolution referred to could be construed as a grant, it would be valid, being authorized by act of the Legislature. Davis vs. the Mayor, 4 Kernan, 506. The People vs. Sturtevant, 5 Selden, 273.

In the case of Davis, Justice Denio refers to the charter of the New York and Harlem Railroad Company as illustrative of the power of the Municipal Government to license the location of railroads in streets when authorized thereto by the Legislature, and a majority of the judges decide that in the absence of any such authority the grant to Sharp and his associates for a railroad in Broadway was void.

It is no answer to this view that they have by

ordinance heretofore limited the use of steam to Forty-second street, because the power to regulate is continuous and discretionary. New York and Harlem Railroad Company *vs.* the Mayor, etc. Common Pleas, *supra* opinion of Judge Hilton.

In disposing of this branch of the case, it is proper to say, assuming, as claimed by the plaintiffs, that the New York and Harlem Railroad Co. have not complied with the ordinances of the Common Council, or kept their agreements in all respects in reference to the use of the Fourth avenue as a railroad, that those facts do not warrant the interposition of courts upon the application of a third party, however strongly they may address themselves to the Common Council in reference to the exercise of their regulating power.

They are matters resting entirely between the Common Council and the Harlem Railroad Company, of which the former should doubtless take notice, and remedy in the faithful discharge of their public trust.

I deem it also proper to say that, in matters which are discretionary, a charge of improvident legislation does not authorize the interference of the courts. There may be some reason of public necessity or public benefit which will influence the Common Council to repeal an ordinance a short time since defended as a just measure of legislative policy, however extraordinary that may seem; but I have no power in a case like this to call for motives or reasons for legislative acts.

There being, then, no power to prevent the repeal of the ordinance of December 27, 1854, the second question presents itself, viz:

Whether the use of steam by the New York and Harlem Railroad Company is authorized by law? I have adopted this form of the question, because it seems to be established beyond controversy on principle and authority, that what is authorized by law is not a nuisance. (1st Baptist Ch., etc., *vs.* the Utica and Sch. R. R. Co., 6 Barber, 318. See also 5th Barber, 79. *Brown vs. Susquehanna R. R. Co.*, 2 Kernan, 491.) It is a legal solecism to call that a public nuisance which is maintained by public authority. (Per Justice Hand. *Harris vs. Thompson*, 9 Barber, 364. *Davis vs. the Mayor*, etc., 4 Kernan, 524.) In this case of *Davis*, although it is asserted that the use of cars on a railroad in Broadway would be a public nuisance, yet it is said by Denio, J., that "if authorized to run upon the street, inconvenience would have to be submitted to, but if placed there without right, the authors of the act could not defend themselves from the charge of nuisance;" and he stated further, that "the authorities leave no doubt upon the question."

If, however, a thing be authorized by the Legislature which by the common law would be a nuisance and there be any excess of the power conferred, or any irregularity in its exercise, it would be a nuisance *pro tanto*. (*Renwick vs. Morris*, 3 Hill, 363; 7 Hill, 576.) And in actions to recover consequential damages arising from the use of steam on railroads and authorized by law, the defendants are not liable unless the act complained of was not in conformity to the law, or the authority given was not exercised with proper care and skill. (*Chapman vs. the Albany and Sch. R. R. Co.*, 10 Barber, 300; 6 Barber, *supra*, 303. *Williams vs. the New York Central R. R. Co.*, 16 New York Rep., 103.

The mere exercise of the franchise, though it may occasion inconvenience and interfere with the full enjoyment of health and property, by producing effects disagreeable to the senses, or otherwise affecting the safety of life and person, would not make it a nuisance, provided, as already suggested, the precise thing is done which is authorized by law.

It is not shown in this case that the New York and Harlem Railroad Company are exercising the privileges of their charter in an unlawful manner.

The objection goes to the use of steam south of Forty-second street as a motive power.

Upon the principles evolved by these cases, and on the facts and circumstances disclosed by the complaint and papers submitted, I should feel at liberty to determine that the use of steam below Forty-second street by the New York and Harlem Railroad Company was a nuisance which should be arrested at once, if there was no act of the Legislature authorizing it; but with such an act before me, it is equally my duty to say, for the reasons herein before assigned, that such use of steam is not a nuisance, and cannot be restrained.

It was urged on the argument that the Legislature had no power in itself to authorize the creation or existence of a nuisance. However correct this may seem to be as a general principle, the power of the Legislature to subvert the common law has been employed in numberless instances; and the right to do so, unless violative of some limit in the Constitution, has not been questioned in any case in this State that I am aware of.

Indeed, it is not an uncommon thing to find in the adjudications of this State, the principle that statutes in derogation of the common law must be strictly construed. *Harris vs. Thompson*, *supra* 9 Barber, 365, 12 Howard Pl. Rep. 14. There is, however, a further answer to this proposition, and it is, that steam as a motive power is not, *per se*, a nuisance, and, therefore, a grant of the right to use it cannot be said to be the creation of a nuisance.

It may, indeed, with propriety be said, that steam, as a motive power, is one of great practical utility, and its application almost indispensable, in an age when the mind of the whole world, but particularly of this country, seems intent upon annihilating space, by facilitating and expediting the transit of *word* and person to different points of destination; but yet its appliance, whenever it is possible, should be regulated with regard to the rights of each member of the community.

I think the injunction demanded cannot be granted, and that the temporary injunction should be dissolved, and the motion denied.

Ordered accordingly.

A preliminary injunction, similar to the one issued from the Common Pleas, was granted last week by Judge Sutherland, of the Supreme Court. With the exception of one allegation, the application is based on the same complaint as that in the Common Pleas. In that allegation plaintiffs charge "upon information and belief that the members of the present Common Council have been bribed by means of money or promises of the same to vote in favor of the repeal of the said ordinance." Mr. O'Connor is engaged in behalf of the Company. The motion is still pending.

(From the Journal of the Franklin Institute.)

Railroad Frictions.

On the necessity of further Experiments on Friction, especially upon Railroad Frictions, or the Friction of Metals in motion, under heavy insistent weights and small surfaces of pressure.
By ELLWOOD MORRIS, Civil Eng.

The importance of a correct knowledge of the laws of friction can hardly be exaggerated, as without this knowledge, the finest conception of the mechanic and engineer would fail to realize their appropriate results. In modern times these laws have received great attention, and yet in some of the most important frictions of the day, the experiments which guide us are both inadequate and anomalous.

A long roll of the ablest mechanical philosophers have devoted themselves to illustrating the friction of substances:—from Amontons, [1699], through Coulomb, [1781], Vince, [1785], and Rennie, [1829], down to Morin, [1831-4], who, under the direction of the Government of France, made an elaborate series of experiments on *Friction*:—yet notwithstanding all the high intelligence, and the labor expended upon this important subject, the engineers who first came to apply the laws enunciated by the philosophers to the estimation of the frictions between metals under heavy insistent weights as they occur upon railroads, for instance, soon found themselves most woefully at fault.

Although Amontons, De La Hire, and Euler had assumed the co-efficient of rubbing friction between hard bodies, [without unguents,] to be usually about $\frac{1}{3}$ of the insistent weight, Rennie, and other acknowledged authorities, had shown experimentally, that without unguents the rubbing friction between hard metals might "very generally be estimated at about 1-6th of the pressure"—but this—in Rennie's trials—was with small insistent weights of less than 33 lbs. to the superficial inch of contact, and we may here say, that all the mechanical philosophers limited the deductions from their experiments "within the limits of abrasion,"—and though Morin showed that all frictions without unguents produced some slight abrasion, this militates not against our generalization, as under the moderate insistent weights employed in the experiments, that abrasion was necessarily but little—too slight, indeed, to seriously affect results.

Morin's experiments confirmed generally those of Rennie, but the applied weights were not at all adequate in magnitude to represent what we now term "Railroad Frictions."

A reliance upon the results of these philosophers—accurate though they may be within their limited range—led at once to erroneous conclusions, when applied to the heavy frictions of railroads.

A brief illustration of this will suffice:—In 1838, Nicholas Wood, Esq., published in London a much enlarged and carefully revised and improved edition of his valuable and well known Treatise on Railroads—his own experiments therein cited, though made with too small weights, showed 1-6 to 1-16 *adhesion* or *bite* of the wheels of locomotives upon rails; and this adhesion, it is well known, furnishes the fulcrum for their motion, and absolutely limits their progressive power.

Nevertheless, Mr. Wood, in the standard work referred to, finally concluded to assume only 1-15 of the insistent weight as the *effective adhesion* of a locomotive clear of that necessary to move itself.

To show the anomalous condition of the science of friction at that day, [1838,] though more than four years subsequent to the publication of the bulk of the celebrated experiments of Morin, and nine years subsequent to those of Rennie, we may state, as a curious fact, that in the very same year [1838] one of our ablest and most experienced American civil engineers, B. H. Latrobe, Esq., in his famous report upon the location of the Baltimore and Ohio Railroad, assumed—as the result of experience here—1-7-5 as the co-efficient representing the *effective adhesion* of a locomotive engine.

* Vol. 119, Philos. Transac., 1829, p. 160.

We see, then, that upon opposite sides of the Atlantic ocean, at the same moment of time, two of the highest authorities on railroad subjects, both thoroughly acquainted with the accepted laws of friction, were founding the most vital and important conclusions upon the *adhesion of locomotives*; and yet the English authority was assuming that adhesion to be only 1.15 of the weight upon the driving wheels, while our American authority, as the result of actually existing experience here, stated it at 1-7-5, or *precisely double*! And we may here add, with pleasure, that Mr. Latrobe was much the nearest right.

At a long subsequent period, [1853,] Mr. Latrobe found by careful trials at the opening of the mountain division of the Baltimore and Ohio Railroad, that the performance of the heaviest class of locomotives, with full loads upon the 105 and 116 feet ascending grades of that well known railroad, showed an adhesion in actual work of nearly $\frac{1}{3}$. And in support of this, we may state, that the working of fully loaded locomotive engines on other roads has now shown conclusively, that at low speeds in the haulage of heavy freight we may fully rely upon an average adhesion of 1-6 of the weight upon the driving wheels of a locomotive; while under favorable circumstances an adhesion of $\frac{1}{3}$, or even more than $\frac{1}{3}$, will be developed, in defiance of the maximum of friction having been fixed by modern writers at 1-6th.

The late W. R. Casey, Esq., a civil engineer of eminence, in an able article published in the AMERICAN RAILROAD JOURNAL, Sept. 15, 1839, was the first to draw the attention of professional men to the fact that we were largely under-estimating the maximum adhesion of locomotives; and he showed conclusively that even in 1836, Baldwin's and Norris's American locomotives had already realized an adhesion of between $\frac{1}{2}$ and $\frac{1}{3}$ of the weight imposed upon their drivers!

These, and other facts, clearly indicated that the laws of friction, as then accepted by the mechanical world, were inadequate to guide us in the new frictions developed by the application of steam power to railroads; and the uncertainty existing in the minds of even professional men, as to the true co-efficient of friction, developed by the adhesion of a driving wheel upon a rail, accounts in part for the astonishment with which many engineers witnessed the ascension by locomotives of inclined planes, previously worked by stationary power, and this uncertainty doubtless had its weight in inducing a leading English engineer—Prof. Vignoles—even so late as 1844, to name 1 in 50, or a gradient of 105 6-10 feet per mile, as the limit of grade which could be practically worked by locomotive power, though at the present day we know that upon the Baltimore and Ohio, and Virginia Central Railroads, gradients of 1 in 20, and even 1 in 10, have, temporarily, been successfully surmounted by locomotives, with passengers.

For the very important discrepancies which are found between the railroad frictions, actually developed by practice, and what they should have been, had they followed the laws laid down by Rennie and Morin, the writer has endeavored to account—without invalidating the labors of either—by remarking that all the experiments upon the friction existing between metals in motion, from which the mechanical philosophers have deduced their governing laws of friction, were made *within the limits of abrasion*, and were usually stopped so soon as the metals began to *abrade* each other—while, on the other hand, all railroad frictions are destructive frictions, or those in which the metals in contact *constantly abrade* each other.*

It will be seen, then, that the ordinary experiments upon friction are inapplicable to some of the most important railroad frictions, and hence there would seem to be a real necessity for further experiments, under the actual circumstances which occur on railroads, or, at least with such great weights, and small surfaces of contact, as may more closely assimilate to them.

A somewhat similar view of this subject was

taken by the writer, in an article in this Journal for March, 1851, in which he argued the probability that—contrary to the received laws of friction—under great insistent weights and small surfaces of pressure, as between the driving wheels of locomotives, and the rails on which they move, there was strong reason to believe that *friction increased in some ratio to the surface pressed*.*

It will be remembered that Rennie and Morin both concur in laying it down as a law, that friction is always "proportional to the pressure," irrespective of the extent of surface pressed or of velocity, and that this is almost universally accepted by the mechanical philosophers of our day, [though recent French experiments indicate that velocity should not be neglected;] if, then, it can be established that within the important range of railroad frictions, whether owing to abrasion, or any other cause, "*friction actually increases in some ratio to the surface*," and not wholly irrespective of it—as now taught—important consequences can hardly fail to flow from such conclusion, and the necessity of further experiments to establish the laws of *abraded frictions*, between metals in motion, will become apparent.

In his article of 1851, the writer said: "When engines slip their wheels on railways, both wheels and rails *abrade*, the law of friction changes, and we enter at once upon a new field, in which we have no exact results recorded, and of which we only know that the co-efficient of friction is greatly increased.

The writer had frequently computed the *adhesion* of locomotives from actual loads drawn by them on railways of known grade, and like other engineers had found, that the adhesion exhibited, far exceeded the extreme limit of 1-6, laid down as the maximum by Rennie and Morin; and he had also noticed that fully loaded locomotives, in passing from broad to narrow rails, *invariably slipped their wheels, upon striking the narrow rail*; and hence, in the article of 1851, he inferred that the adoption of rails of the top width of the available wheel tread—say 4 inches—would largely augment the ascensive power of locomotives on high gradients. Since then a striking fact has been made known, which seems to confirm, in a conclusive manner, the accuracy of the views then taken, on this important point in railroad affairs.

The fact referred to, has been developed in the working of the Mine Hill and Schuylkill Haven Railway, a heavy coal road: the Chief Engineer of this work, R. A. Wilder, Esq., an able and experienced officer, states that upon his road a 92 feet grade laid with narrow topped rails, is immediately succeeded by a 130 feet gradient, on which rails of full width are placed, and in the working of this road with heavy coal trains, "it is found that an engine can draw more—ascending—upon the 130, than on the 92 feet grade, although the actual resistances on the former grade are full 33 per cent. greater than on the latter." We think he might fairly have estimated the resistances upon the 130 feet grade, as being full 40 per cent. over those of the 92 feet gradient, since gravity alone upon the former would amount to 55 lbs., and on the latter to only 39 lbs. per ton of 2,240.

(To be concluded.)

Watertown and Madison Railroad.

The Watertown and Madison Railroad was sold on the 18th ult. under a foreclosure of the first mortgage, to Hon. Russell Sage, of Troy, N. Y. He proposes to commence work upon the line immediately and complete it up to Waterloo this fall. The whole road is to be finished in season for the fall trade next year.

* In the article referred to, an error of the press made the writer say, "in the same ratio to the surface," instead of "*in some ratio to the surface*," as he wrote at the time.

† Some able engineers, as William Parker, Esq., and J. W. Brooks, Esq., have advocated, and to a limited extent have used, rails 3 inches wide on top, though with a different object in view.

Railroad Decision.

In the Circuit Court of Bedford County, Va., last week, in the case of Steptoe vs. the Virginia and Tennessee Railroad Company, where the plaintiff sued for damages sustained by him from the trespass of cattle on his wheat field, through the neglect of defendants to keep the cattle guards on their road in repairs, the judge decided that the company was neither obliged to construct cattle guards nor keep them in repair. Notwithstanding the instructions of the court, the jury brought in a verdict for the plaintiff for \$120, which verdict was set aside as contrary to the instructions of the bench.

Chicago, St. Paul and Fond du Lac Railroad.

At a meeting of the stockholders of this road, held at Chicago on the 6th, the following gentlemen were elected Directors for the ensuing year: J. J. R. Pease, Wis.; A. L. Pritchard, Wis.; Winslow Blake, Wis.; Albert Winslow, Wis.; C. Butler, N. Y.; John Bannister, Wis.; S. J. Tilden, N. Y.; O. D. Ashley, N. Y.; Wm. B. Ogden, Ill.; Philetus Sawyer, Wis.; J. F. Chapin, Ill.; Henry Smith, Ill.; Perry H. Smith, Wis.

Mr. Wm. B. Ogden was re-elected President, and Mr. Charles Butler, Treasurer.

The Chicago correspondent of the St. Louis Republican says:

The Fond du Lac Railroad has been given over to the trustees for the bondholders, and a capitalizing scheme has been adopted, to the satisfaction of nearly all parties. The new stock is fixed at \$4,000,000, made up as follows:

\$4,000,000 old stock, represented at 25 cents on the dollar.....	\$1,000,000
1,000,000 floating debt at 25 cents on the dollar.....	250,000
3,000,000 second mortgage bonds at 75 cents on the dollar.....	2,250,000
Construction stock for completing road.....	500,000
	\$4,000,000
The first mortgage bonds amounted to.....	3,000,000
	\$7,000,000

Upon this amount the net earnings of the road will pay an annual interest of 7 per cent. The first mortgage bondholders agree to fund their interest for two years in order to give the company the full amount of net earnings in connection with the construction stock to enable them to finish the road, 55½ miles from Janesville to the La Crosse Junction, which will give them 200 miles of road from Chicago to Oshkosh. The road will be speedily ballasted the whole distance with gravel from the Fox River Valley, at a cost of about \$1,000 per mile. Hon. Wm. B. Ogden is one of the trustees and has contributed over eight hundred thousand dollars towards the construction of the road. Over 2,000,000 acres of lands are held by the company as a grant from Congress to aid in the construction of the road Northward to Lake Superior.

Racine and Mississippi Railroad.

This road has been completed and opened to the village of Davis, in Stephenson County. The Racine News of the 7th says: "We now have a railroad 91 miles long, in a fine condition, well equipped and as carefully and uniformly operated as any road in the West. This places the road within about twelve miles of the important city of Freeport, and it is now only necessary to complete that small link to give us a direct through line to Galena, Dubuque and the Mississippi River. This twelve miles is more than three-quarters graded, and the iron and other materials for the track are on hand."

* See Journal of the Franklin Institute for March, 1851, page 152.

Railway Share List.

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	145	2,494,900	3,482,000	6,594,829	576,483	88,368	none	---	Brunswick and Florida, Ga.	30	151,837	463,648	638,649	In progr.	---	---	---
Androscog. & Kennebec	55	457,909	1,835,309	2,210,947	159,513	---	---	---	South Western	92	1,399,100	441,292	2,209,323	965,214	208,771	8	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	213,255	---	---	---	Tennessee and Alabama	80	399,754	628,889	679,906	63,776	29,406	---	---
Portl. Saco, & Portland	55	1,396,400	---	1,396,400	1,359,373	253,717	120,909	9 1/2	Tennessee and Mississ.	59	70,328	468,384	1,189,652	113,802	87,210	---	---
Boston, Concord, & Montreal	95	1,500,000	1,104,586	2,604,586	2,648,977	237,767	174,025	16	Memphis and Charleston	257	2,228,177	2,096,288	5,672,470	642,022	334,504	---	---
Cheshire	30	2,086,921	890,313	3,179,687	355,629	113,077	---	---	Mobile and Ohio	224	6,784,819	2,096,459	10,701,428	564,882	378,428	---	---
Concord	36	1,600,000	8,248	1,412,576	317,050	126,664	4	45	Miss. Central	100	1,576,474	926,796	2,503,098	284,178	116,679	---	---
Northern, N. H.	82	3,068,400	406,286	3,068,400	365,830	156,996	4	49	Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	284,255	150,789	---	---
Count. & Passumps. Riv.	91	1,000,000	800,000	1,784,146	177,588	78,401	none	---	N. O. Opelousa & G. W.	80	2,800,000	760,000	3,877,626	284,178	127,450	---	---
Hatland & Burlington	117	2,233,370	4,158,369	4,578,396	384,125	77,201	none	---	N. O. Jackson & N.	130	4,035,000	1,810,610	3,500,000	189,008	---	---	---
Vermont and Canada	47	1,350,000	---	1,350,000	Leas't cost	51,269	none	40	Vicksburg, Shreveport, & Tex.	20	851,293	4,447	831,821	In progr.	---	---	---
Vermont Central	116	5,000,000	2,233,299	8,402,065	808,328	156,269	---	---	East Tennessee and Ga.	111	1,192,974	1,735,669	2,703,428	227,363	104,092	---	---
Boston and Lowell	25	1,830,000	438,920	2,412,251	435,863	171,382	6	83 1/2	East Tennessee and Va.	48	626,075	1,732,684	3,203,138	61,814	39,082	---	---
Boston and Maine	74	4,076,974	---	4,229,281	770,802	305,509	6	95 1/2	Nash. and Chattanooga	159	2,263,905	1,622,793	3,896,703	641,552	219,287	---	---
Boston and Providence	43	3,160,000	289,720	3,534,468	654,176	245,194	6	89	Covington & Lexington	18	1,384,850	3,065,917	4,091,604	426,408	220,906	---	---
Boston and Worcester	44	4,500,000	599,974	4,843,779	1,019,149	388,513	6	94	Lexington and Frankfort	29	430,055	158,899	765,600	95,807	45,719	6	---
Cape Cod	47	681,690	291,007	1,031,625	122,960	39,899	---	49 1/2	Lexington and Danville	13	694,444	71,000	1,500,000	In progr.	---	---	---
Connecticut River	60	1,691,110	275,772	1,801,244	267,710	66,096	3	44	Louisville and Frankfort	65	741,089	625,216	1,602,098	245,750	109,059	6	---
Eastern, Mass.	67	2,583,406	2,441,373	5,024,607	616,156	272,479	---	46	Atlantic & Gt. Western	264	896,939	77,494	613,231	In progr.	---	---	---
Fitchburg	67	3,640,000	100,000	3,872,821	668,974	250,848	6	89 1/2	Bellefontaine and Ind.	118	1,874,895	1,816,237	2,998,392	348,454	120,836	---	---
N. Bedford and Taunton	21	600,000	---	541,586	168,925	27,827	6	---	Cleveland and Toledo	200	3,353,712	4,225,658	7,193,016	930,282	433,780	9 1/2	---
Old Col'y and Fall River	77	3,015,100	260,100	3,362,949	683,357	305,140	6	95 1/2	Cleveland and Mahoning	66	---	---	628,683	In progr.	---	---	---
Vermont and Mass.	69	2,232,541	1,019,148	3,241,975	240,133	52,267	none	7	Clev. and Pittsburg	133	2,780,744	3,043,922	5,637,468	681,877	309,518	---	---
Western, Mass.	155	5,150,000	6,839,090	10,495,090	1,117,982	889,763	8	104 1/2	Clev. P. & Ashtabula	95	3,000,000	1,496,548	8,955,290	1,251,539	681,454	15	---
Worcester and Nashua	46	1,141,000	205,565	1,351,271	216,888	82,720	4	82	Cin. Hamilton & Dayton	60	2,155,800	1,526,092	3,130,316	487,421	290,783	45	---
Providence and Worcester	43	1,510,020	300,000	1,781,048	344,773	155,044	7	44	Cin. Wilm. & Zanesville	131	2,421,176	3,065,917	5,096,210	403,212	181,688	10	---
Hartford and N. Haven	72	2,356,000	944,000	3,324,181	769,065	307,807	10	117 1/2	Columbus and Xenia	55	1,490,450	149,000	1,882,478	403,212	181,688	10	---
Hart'd, Prov. and Fishkill	122	1,941,340	2,375,274	4,202,515	367,895	166,162	none	---	Dayton, Xen. & Belpre	63	437,835	422,658	800,496	In progr.	---	---	---
Housatonic	74	2,000,000	423,685	2,423,685	318,475	109,344	none	---	Dayton and Michigan	140	1,076,802	509,011	1,188,826	In progr.	---	---	---
Waugusseton	57	1,031,800	524,244	1,580,723	237,416	114,237	---	---	Dayton and Western	35	310,000	702,481	1,036,173	125,940	65,253	---	---
N. York and N. Haven	62	3,000,000	2,382,071	5,519,580	864,995	254,569	3	---	Saton and Hamilton	42	489,783	532,869	1,176,163	140,936	50,008	---	---
N. Haven and N. London	50	738,258	761,462	1,450,318	88,007	30,318	none	---	Little Miami	66	2,981,282	1,266,000	3,225,157	775,442	290,123	10	80 1/2
N. London, W. & Palmer	66	510,500	1,052,000	1,603,239	120,571	51,644	none	---	Sandusky, Dayton & Cin.	171	2,697,000	5,005,000	6,026,090	632,514	---	---	---
Norwich and Worcester	66	1,122,300	724,183	2,598,671	265,417	44,647	---	---	Central Ohio	138	1,626,856	5,191,877	6,421,008	712,213	134,371	---	---
Albany Northern	32	439,005	1,625,098	1,840,695	117,716	9,904	---	---	Pittab. Ft. Wayne & Chicago	123	6,247,040	9,822,550	14,579,704	1,646,359	677,787	---	---
Black River and Utica	35	643,330	317,353	974,323	In progr.	---	---	---	Pittab. & Mayv. & Cin.	50	371,350	31,000	360,383	In progr.	---	---	---
Buffalo, Corn. and N. Y.	100	1,487,874	1,601,183	2,819,096	172,470	66,333	---	---	Sand'y, Manat. & Newk.	127	1,350,000	2,206,357	3,662,387	328,958	164,479	---	---
Buffalo and N. Y. City	92	798,439	2,597,849	3,401,868	288,392	31,896	none	---	Scioto & Hocking Valley	56	403,975	509,650	888,868	In progr.	---	---	---
Buffalo and St. Line	69	1,300,000	1,040,000	2,494,364	679,750	85,763	10	---	Spring, Mt. Vernon & P.	113	1,000,000	950,000	---	In progr.	---	---	---
Canandaigua and Elmira	47	434,111	922,393	1,276,796	174,089	69,606	---	---	Tol. Wabash & St. Louis	242	2,985,100	7,577,500	10,542,000	Recently opened.	---	---	---
Canandaigua & Niagara F.	91	1,315,000	2,279,854	3,495,832	---	---	---	---	Cin. Log. and Chicago	255	4,196,678	1,006,126	2,080,433	In progr.	---	---	---
Cayuga & Susquehanna	35	687,000	606,689	1,187,582	135,483	48,649	none	---	Evansville & Crawfordsv.	109	988,061	1,270,872	2,158,713	249,869	124,140	---	---
Hudson River	144	3,758,468	9,250,382	12,737,898	1,902,828	688,880	28 1/2	---	Ind. and Cincinnati	68	1,686,899	1,564,584	3,029,939	491,743	245,622	---	---
Long Island	95	3,000,000	647,193	2,555,986	325,719	56,186	none	11 1/2	Indiana Central	68	612,350	1,281,179	1,909,911	368,189	204,685	---	---
New York Central	556	24,136,661	14,607,510	30,615,816	3,027,251	3,578,736	8	83 1/2	Ind. Clev. & Pittsburg	83	835,791	1,07,694	1,828,425	258,19	85,248	---	---
New York and Erie	464	11,000,000	26,081,468	34,469,324	742,607	1,454,082	none	16	Jeffersonville	66	1,014,252	694,000	1,398,576	222,737	94,318	---	---
New York and Harlem	138	5,717,100	4,822,498	8,768,203	1,040,393	324,891	none	12 1/2	Madison and Indianapolis	87	1,647,700	1,336,816	1,205,000	260,214	118,828	---	---
Northern, N. Y.	118	1,633,022	4,408,874	6,470,714	620,153	135,754	none	1	New Albany and Salem	288	2,535,121	5,281,948	6,643,189	645,827	371,402	---	---
Oswego and Syracuse	35	307,130	213,025	752,036	149,373	78,754	8	---	Peru and Indianapolis	73	---	868,314	---	150,000	90,000	---	---
Potdam and Watertown	29	467,200	294,189	749,683	In progr.	---	---	---	Terre Haute and Ind.	73	1,361,450	250,125	1,585,809	481,272	206,079	10	---
Rensselaer & Saratoga	25	610,000	140,000	896,433	241,149	82,600	7	---	Chicago and Rock Is. P.	182	6,248,000	1,734,318	6,028,272	1,884,198	850,639	---	---
Saratoga and Whitehall	48	500,000	395,600	---	71,909	21,089	none	---	Chicago, Burl. and Quincy	210	4,631,540	3,962,970	8,042,426	1,606,167	811,767	---	---
Syracuse & Bingham'n.	80	788,389	1,578,804	2,272,777	159,494	22,603	none	---	Chic. St. Paul & Fd. du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Troy and Boston	27	437,830	737,079	1,109,822	156,383	55,184	---	---	Galena and Chicago	259	6,023,800	3,999,015	9,395,455	2,316,786	1,192,042	---	---
Watertown and Rome	97	1,500,000	700,979	2,200,500	440,290	162,037	3 1/2	63	Illinois Central	704	6,556,435	20,316,422	23,877,669	2,993,965	565,972	8	84 1/2
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	243,393	114,639	---	---	Peoria and Ogawika	181	1,569,889	2,200,000	6,400,000	In progr.	---	---	---
Osander and Amboy	94	3,000,000	11,407,200	8,794,096	1,640,787	594,114	12	120	Ohio & Miss. (Wat. Div.)	147	1,780,296	2,292,403	4,870,586	Recently opened.	---	---	---
London and Atlantic	30	3,485,000	1,550,854	1,738,171	117,389	46,642	none	---	Terre Haute, Alt. & St. Louis	208	3,011,150	4,925,927	8,726,764	823,767	247,757	---	---
New Jersey	30	3,485,000	788,344	3,680,017	91,617	534,951	10	127	Detroit and Milwaukee	185	838,000	1,128,964	1,966,969	Recently opened.	---	---	---
New Jersey Central	63	2,000,000	3,592,828	6,621,329	682,940	357,193	---	---	Mich. Central	282	6,057,840	8,666,639	12,847,238	2,745,758	764,936	---	---
Morris and Essex	31	1,167,805	340,000	1,684,127	237,765	101,642	3 1/2	---	Mich. South'n & N. Ind.	476	8,776,400	10,459,68	19,326,094	2,309,487	544,811	8	57
Alleghany Valley	44	1,637,867	842,564	1,988,317	Recently opened.	---	---	---	Green Bay, Mi. & Oh.	40	1,000,000	780,000	1,780,000	---	---	---	---
Cataw. W. & Erie	63	1,700,000	1,940,000	3,640,000	219,253	62,450	---	---	Milwaukee and Miss.	235	3,440,673	4,610,583	8,014,256	882,818	372,691	10	---
Cumberland Valley	52	1,149,400	61,103	1,266,675	188,134	583	---	---	Milwaukee & Watert'n	72	354,861	132,000	551,238	In progr.	---	---	---
Dol. Lack. & Western	170																

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$333,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	85
Buffalo and State Line	500,000	Do. Inconvertible	7	April, October	"	1866	90	90
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858	---	---
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859	---	---
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-84	63	75
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	50	55
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	83	90
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	70	75
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	---	---
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	---	---
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	93	95
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	55	65
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	60	65
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	---	---
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	---	---
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	62 1/2	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	45	47 1/2
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	74	74 1/2
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1891	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	---	72 1/2
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	97 1/2	98
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	94	94 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	---	---
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	87 1/2	93
Jeffersonville	300,000	Do. 2d sec. inconv.	8	April, October	"	1873	---	---
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	---	85
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	82 1/2
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	75	82 1/2
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	7	May, Novemb.	"	1874	70	76 1/2
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	71 1/2	72
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	82 1/2	85
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	96	97
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	93	95
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	74	76
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	---	73
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	75	78
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1865-62	---	90
Do. do.	2,325,000	Do. oth. sec. conv. till 1868	8	May, Novemb.	"	1864-76	---	---
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	---	---
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	---	85
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	---	70
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	---	60
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	100	101
Racine and Mississippi	680,000	Do. conv. sink f'd	8	Feb'y, August	N.Y.	1875	---	75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	---	---
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	---	---
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	---	---
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	58	63

Extract from De Coppet & Co.'s Money Circular for the European Steamer of October 13th.

[TRANSLATED.]

NEW YORK, Tuesday, Oct. 12th, 1858.

The Stock market has been exceedingly active throughout the week which has elapsed since the date of our last advices. The movement has been accompanied by a moderate rise, in which all descriptions of securities have more or less participated. The improvement may be attributed to the continued favorable foreign news, and to the undiminished supply of money—rates of interest, contrary to the anticipations of capitalists, not having advanced as the season has progressed. State Stocks—There have been large sales of Missouri 6s, which have risen 2 1/2, and of Tennessee 6s, which have risen 1 1/2. Virginia 6s have advanced 1/2; Louisiana 6s, 1 1/2; North Carolina 6s, 1/2; Indiana 5s, 1/2; and California 7s, new issue, 3 per cent. Sales of Ohio 6s, of 1860, at 102; do. of 1886, at 106 1/2. The new Government Loan has been in better request, and has been sold as high as 104, which is the closing quotation. City and County bonds have been in moderate demand. The principal transactions have been in Louisville 6s, both water-works and railroad issues; in Memphis 6s, guaranteed by State of Tennessee; and in Brooklyn 6s—the last named at an advance of 1 1/2 per cent. There have also been sales of New York City 6s, due in 1887, at 103 1/2; and of Mason Co., Ky., 6 per cents, at 75. Railroad Bonds—There has been more movement in these than for some time past, accompanied by a general advance in prices. New York Central 6s have risen 1 per cent.; do. 7s, 2; Galena and Chicago, 1st mort., 1 1/2; do. 2d mort., 2 1/2; Hudson River, 1st mort., 1/2; do. 2d mort., 1/2; Illinois Central Constructions, 1/2; Harlem 1st mort., 1; Michigan Central 8 per cents, 1; Erie 3d mortgage, 2; do. 4th mortgage and unsecured Bonds, 1 1/2; Erie 2d mortgages have declined 1/2; Milwaukee and Mississippi 2d mortgage 10 per cents, 1; and Illinois Central Freehold Bonds, 2 per cent.; Michigan Southern 1st mortgage 7s have sold at 84; do. Sinking Fund at 71 1/2; Reading 6s, of 1886, at 72; and Little Miami 6s at 84 1/2. Railroad Shares have been very active, and, with few exceptions, have advanced. The rise has been as follows: 1 1/2 per cent. on Chicago and Rock Island, 3/4 on Cleveland and Toledo, 1 1/2 on Erie, 1/2 on Galena and Chicago, 1 1/2 on Michigan Southern, 5 on Michigan Central, 1 on Milwaukee and Mississippi, 2 1/2 on New York Central, and 4 1/2 on Reading. The two last named have given rise to exceedingly large transactions; more than 30,000 shares of each having changed hands. Cleveland, Columbus and Cincinnati has been sold at from 90 1/2 to 91 1/2; Harlem Preferred, from 23 1/2 to 25 1/2; and Cleveland and Pittsburgh at 7 1/2. Money continues superabundant. Short loans, 3 1/2 a 5; indorsed paper, 4 1/2 per cent. per annum. Exchange on Europe is still scarce, and the rates have varied but little. Principal business on London, 109 1/2 to 110; Paris, 5.13 1/2 to 5.14.

DE COPPET & CO.

Extract from Marie & Kan's Money Circular for the European Steamer of Oct. 13th.

[TRANSLATED.]

NEW YORK, Tuesday, Oct. 12th, 1858.

Our last advices were dated 4th inst. The recent advices from Europe, announcing the great accumulation of specie in the banks of England and France, have forced upon our capitalists the conviction that the abundance of money now apparent at all the centres is not of a momentary character, as was generally supposed, but that, on the contrary, there is reason to look for its continuance for a long time to come. This impression has induced a lively demand for Stocks, and extending to the more or less speculative descriptions. The operators for a fall have found themselves compelled to close their contracts at a loss, and the operators for a rise have redoubled their purchases, seeing that the tendency continued upward. The advance is quite general—the only notable exception being Erie second mortgage and Panama and Pacific Mail. The two last fell

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,125,500	Mortgage	6	Jan'y, July	Balt.	1875	85 1/2	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	93	95
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	97 1/2	98 1/2
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	82	85
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	74	76
Do. do.	6,000,000	4th mortgage, not convertible	7	April, October	"	1880	56	56 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	33	34
Do. do.	4,351,000	Convertible, Inscription	7	Feb'y, August	"	1871	32	33
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	32	33
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	101 1/2	102 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	90 1/2	91
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	70	70 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	89	90
Do. (Free Land)	3,000,000	M'ge 345,000 acrs—priv. 7 shars	7	March, Sept.	"	1860	86	87
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	85	90
New York and Harlem	1,800,000	Do. do.	7	May, Novemb.	"	1861-72	89	90
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-69	93	95
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	81 1/2	83
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1863	68	69 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	93	93 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	104	106
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	115	---
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	---	---
Do. do.	1,300,000	Do. convertible	6	Jan'y, July	"	1870	91	92
Do. do.	3,469,000	Do. inconvertible	6	April, October	"	1886	72	72 1/2

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York, 5 per ct. 1858-60	97 1/2	99 1/2	---	Milwaukee, 7 per ct. coup.	X	Divers	50
Do. 5 do. 1870-75	94	95	---	New Orleans, 6 per ct. cp. R.R.	X	Do.	72 1/2
Do. 5 do. 1883	103	103 1/2	---	N. Orleans, 6 per ct. cp. municip.	X	Jan'y, July	84
Do. 5 do. 1890-98	90	95	---	Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	58 1/2
Albany, 6 per ct. coup. 1871-81	X	Feb'y, August	98 1/2	Pittsburgh, 6 per ct. coup.	X	Divers	50
Alleghany, 6 per ct. coup.	X	Jan'y, July	60	Quincy, 8 per ct. coup.	X	Jan'y, July	60
Baltimore, 6 per ct. 1879-90	X	Quarterly	98	Racine, 7 per ct. coup.	X	10 Feb'y, Aug	80
Boston, 5 per ct. coup.	X	April, October	100	Rochester, 6 per cent. coup.	X	Divers	90
Brooklyn, 6 per ct. coup. Long	X	Jan'y, July	97 1/2	St. Louis, 6 per ct. coup. Long	X	Do.	82
Clev'rd, 7 per ct. cp. W. W. 1879	X	Do. do.	100	Do. do. Municipal	X	Do.	84 1/2
Cincinnati, 6 per ct. coup.	X	Divers	80	Sacramento, 10 p. ct. cp. 1862-74	X	Do.	38
Chicago, 6 per ct. coup. 1873-77	X	Jan'y, July	85	S. Francisco, 7 p. ct. cp. 1865, pay. N.Y.	X	May, Novemb.	60
Do. 7 per ct. coup. 1880	X	Jan'y, July	98 1/2	Do. do. 10 p. ct. 1871	X	Do. do.	87
Detroit, 7 per ct. cp. W. W. 1873-78	X	Feb'y, August	100	Do. do. 10 p. ct. pay. N.Y.	X	Jan'y, July	---
Dubuque, 8 per ct. cp.	X	March, Sept.	100	Do. do. 6 per ct. pay. N.Y. 1875	X	Do. do.	54
Jersey City, 6 p. ct. cp. W. W. 1877	X	Jan'y, July	99	Wheeling, 6 per ct. coup.	X	Divers	50
Louisville, 6 per ct. cp. 1880-83	X	Divers	67	Do. do. 6 p. ct. Muni. 1874	X	March, Sept.	51 1/2
Memphis, 6 per ct. coup. 1882	X	Jan'y, July	64	Zanesville, 7 do.	X	April, October	---

off, on a rumor, thus far wanting confirmation, of the opening of an opposition line, *via* Nicaragua. The Erie second mortgages have declined, in consequence of a letter issued by the President, announcing the impossibility of redeeming the bonds on the 1st of March next, and offering to extend them five years. State Stocks have advanced with large sales, chiefly in Missouri, Tennessee, California and Virginia. Virginias have improved $\frac{3}{4}$ per cent.; Missouri, $2\frac{1}{2}$; Tennessee, $1\frac{1}{2}$; California, new, $3\frac{1}{2}$; Indiana 5s, $1\frac{1}{2}$; North Carolina at 95; Louisiana, 93. The United States 5 per cents., 1874, have been sold at 104, and are now held at 104 $\frac{1}{4}$. Ohio 6s, 1860, sales at 102, 1886, at 106. City and County Bonds—Demand slightly improved. We note sales of St. Louis City Municipal Loan and Railroad issues, St. Louis County 6s and 7s, Memphis City Guarantees, and New Orleans 6s, all at a slight improvement. Brooklyn 6s are in demand at an advance of $\frac{1}{2}$ per cent.—Mason County 6s in better demand, at an advance. Railroad Bonds have improved generally with steady sales, exceeding \$400,000. Erie 2d mort. sales as low as 80a82; do., 4th mort., at 54 $\frac{1}{2}$ a55; do., 1875, 1 per cent. higher; do., 1871, $\frac{1}{2}$; do., 1862, sales at 32, 1 per cent. higher; New York Central 6s, 1; do., 7s, 1876, sales at 98; Illinois Central Construction, $\frac{3}{4}$ per cent. higher; Free-land Bonds sales at 90a87; Michigan Central 1st mort., sales at 1 per cent. advance; Northern Indiana, 1st mort., at 81 $\frac{3}{8}$; Michigan Southern, 1st mort., 2 per cent. higher; do., Sinking Fund, 1; do., 2d mort. sales at 60; Reading 6s, 1886, sales at 71a72; Galena and Chicago 1st and 2d mort. 1 per cent. higher; sales of Hannibal and St. Joseph's Bonds at 58; Milwaukee and Mississippi 2d mort. at 74; Hudson River 1st mort. at 101.—Railroad Shares—A great advance, excepting Panama and Pacific Mail, with a large movement, exceeding 100,000 shares for the week. Erie has advanced $1\frac{1}{8}$. Reading, $3\frac{3}{8}$; New York Central $2\frac{1}{8}$; Michigan Central $5\frac{1}{8}$; Michigan Southern, $1\frac{1}{2}$; do., Preferred, 6; Toledo, $3\frac{1}{4}$; Rock Island 1; Galena, $\frac{1}{4}$; Cleveland, Columbus and Cincinnati, $1\frac{1}{2}$; Milwaukee and Mississippi, 1; La Crosse, $\frac{3}{8}$; Hudson River, $1\frac{1}{4}$; Panama, $\frac{1}{2}$ per lower; Pacific Mail, $\frac{3}{4}$; Chicago, Burlington and Quincy, 2 do.; Illinois Central steady at 79.—Money extremely easy, 8a5 per cent. on call; $3\frac{1}{2}$ a5 $\frac{1}{2}$ for first-class paper. Exchanges—Fair amount of transaction. London, 109 $\frac{3}{4}$ a110 $\frac{3}{8}$, weak; Paris, 6.13 $\frac{3}{4}$ a511 $\frac{1}{4}$, down.

American Railroad Journal.

Saturday, October 16, 1858.

Effects of Reciprocal Free Trade with Canada.

In 1854 the United States and Great Britain, after much difficulty, succeeded in effecting an arrangement by which the same freedom of trade in certain mentioned articles should exist between the United States, and Canada and the British North American Provinces, that has proved of such momentous advantage among the several States of the Union. By this arrangement, breadstuffs, provisions, lumber, coal and other articles, products of both countries, were to be allowed to pass free of duty. Many portions of the United States objected to the arrangement, on the ground that we produced a surplus of every article that we proposed to admit from Canada, while the latter produced scarcely anything else but the articles named, and so, of course, the reciprocity of the thing, must be all upon one side. We demanded and obtained, as an offset, the freedom of the Fisheries and of the navigation of the river St. Lawrence, and the arrangement was consummated. Thus a long vexed question about the fisheries was settled in our favor; a magnificent outlet to the ocean and to the navigation of the waters of

the world was obtained for the vast and important commerce of our Northern Lakes, and a large accession of carrying trade secured to our various lines of internal improvements. If Maine complained that her lumber interests were injured she was told of her advantages gained in the freedom of the fisheries and in cheap coals from the Colonies, and cheaper breadstuffs from Canada. If our wheat growing regions complained of competition from Canadian wheat in our markets, they were shown how egress had been obtained for their productions to the markets of the world without transshipment. In short, it was on the whole deemed a very fair and satisfactory arrangement so far as it went, and was looked upon as a mere commencement which would soon expand into an enlarged list including many articles of our more important manufactures.

A recent change in the office of Consul General has led to some modifications of our regulations and the exaction of fees which have given offence to those engaged largely in Canadian trade, and the consequence is quite a war of words as to the fairness of the original bargain and its profitability as illustrated by its results. As usual in such disputes both parties claim to have been cheated, and while one threatens the abrogation of the treaty, the other says, "do it if you like, but if you do you will only bite your own nose of."

The Montreal Gazette, in a recent article, complains of the "annoying and vexatious manner in which the United States Consular fees have been exacted," and demands a prompt remedy. After giving some figures from the Canadian official returns showing the value of our exports to Canada alone during the last five years to have been much larger than our imports thence, it suggests that the fisheries are of immense importance to a large portion of our people, and that some kind of tax might be imposed upon our vessels as a *quid pro quo* for our Consular fees. This failing, it is further suggested that Canada should give notice of intention to withdraw from the treaty unless the odious imposition of Consular fees is at once removed.

It strikes us that all such bravado is quite foreign to the purpose. The object of the treaty was the removal of restrictions from commercial intercourse and increased facility of transit. In this view, the imposition of the Consular fees and the exaction of Consular certificates is unquestionably an aggression upon the spirit of the compact, though perhaps not of its letter.

The effect of the withdrawal of restrictions has been to raise Canada to the fourth country, in value and rank among our customers,—England, France and Cuba only preceding her in 1857. The following figures show the value of our trade with Canada for five years, the exports being taken from the Canadian returns, and the imports from the United States Treasury returns.

	Imports.	Exports.	Difference.
1853....	\$5,275,116	\$11,818,144	\$6,543,028
1854....	6,721,635	15,533,096	8,811,557
1855....	*12,182,314	20,828,668	8,646,354
1856....	17,488,197	22,704,508	5,216,311
1857....	18,291,834	20,224,648	1,932,814
	\$59,959,000	\$91,109,064	\$31,150,064

Here is an increase of traffic in five years from seventeen to thirty-eight millions with Canada

* First year of reciprocity.

alone, the aggregate for the same period being over one hundred and fifty millions with thirty-one millions balance of trade in our favor. Is not such a commerce worth cherishing?

We will now present some figures, all of which are taken from U. S. Treasury reports to show the advancement of our trade under this treaty with Canada and the Colonies taken together.

EXPORTS.			
Years.	Foreign.	Domestic.	Total.
1852.....	\$3,853,919	\$6,665,097	\$10,509,016
1853.....	5,736,555	7,404,087	13,140,642
1854.....	9,362,716	15,204,144	24,566,860
1855.....	11,999,378	15,806,642	27,806,020
1856.....	6,314,652	22,714,697	29,029,349
1857.....	4,326,369	19,936,113	24,262,482
	\$41,593,589	\$87,720,780	\$129,314,369
IMPORTS.			
Years.	Foreign.	Domestic.	Total.
1852.....	\$6,110,299	\$1,440,419	\$2,631,627
1853.....	7,550,731	2,817,261	14,057,844
1854.....	8,827,560	9,026,435	17,297,004
1855.....	15,136,734	15,200,122	18,520,333
1856.....	21,310,421	16,013,997	13,753,496
1857.....	22,124,296		
	\$81,160,028	\$44,498,234	\$66,260,273

Comment as to the propriety of the continuance of such a traffic is uncalled for, and yet we can hardly forbear calling attention to the fact that this trade being composed principally of raw produce and domestic manufactures, gives more employment to our labor and transportation, than commerce of tenfold its value composed of rich foreign goods could afford. In this sense it is the most important trade we have with foreign powers.

Since the treaty came into operation (1854) a line of steamers between Quebec and Montreal and Liverpool has been established (1856) by which many foreign goods are imported direct to Canadian ports that otherwise would have to be purchased of us. This may account for the falling off of our sales of foreign goods since 1855, from eleven to four millions. The establishment of this direct trade with Europe by steamer from Canadian ports, and the opening of the Grand Trunk lines of railway, render Canada less dependent upon our markets and our routes of internal improvement than formerly; and if we choose to return to our former condition and hamper our commerce with her with such restrictions as to force it into new channels, it may be very questionable whether we should not be the largest sufferers. If this trade were not profitable it is hardly conceivable that we should have continued it so long and prosperously. It seems to us that all this talk about restrictions and counter-restrictions and threats of abrogation of existing commercial regulations, and retaliatory charges upon our fishing vessels, savors altogether too much of schoolboy bravado to be indulged in by two of the foremost commercial countries of the earth.

New York and Erie Railroad.

At the annual meeting of the stockholders of this road, held on the 12th inst., the following gentlemen were re-elected directors for the ensuing year, viz:—Charles Moran, Samuel Marsh, Cornelius Smith, Daniel Drew, John Arnot, Ambrose S. Murray, D. A. Cushman, William B. Skidmore, Ralph Mead, Dudley S. Gregory, Edwin J. Brown, Hermann Gelpcke, George Bruce, Robert H. Berdell, Samuel H. P. Hall, Edward K. Albutis, Geo. T. Cobb.

Erie and Central Troubles.

It is reported that these two companies are again at loggerheads about infringements of the recent compact. The umpire is likely to be obliged to hold open court for the settlement of their numerous complaints. This is no more than we expected. When people cannot attend to their own business satisfactorily, it is either because one or both parties are dishonest or incompetent for the positions they occupy. If managers of railways are incompetent to ascertain, after years of experiment to aid them, at what prices they can do business upon their road and pay fair profits, the quicker they vacate their offices the better. Rates of passage and freight should be based upon such premises and upon no other. This with good, careful, prudent management, and extensive and judicious advertising will secure to any road its proper share of traffic.

Two freight trains on the Ohio and Mississippi railroad came into collision recently, which resulted in the death of the conductor, engineer, fireman and two brakemen. The accident occurred about 46 miles east of Vincennes. The westward train was running at the rate of 20 miles an hour, the other much less. The trains met upon the McCALLUM Bridge, about four miles east of Shoal's station. It is a remarkable fact that the bridge sustained this tremendous collision, and the subsequent weight of engines and cars piled three and four feet deep without deflecting an inch from a straight line, and without injury in any part.

Boston and Maine Railroad.

There is at least one railroad in the United States which has not fallen short of its duties to its bondholders and creditors. The Boston and Maine railroad, in September last, paid off their last instalment of indebtedness, \$50,000, although it did not come due until August 1, 1859, and is now entirely free from debt and likely, under proper management, to remain so forever. It has always met its engagements promptly, and has never failed to pay a dividend since it was opened, in 1842. It has always been kept in good order, and managed so as to secure the good will and profit of all connected with it. Its highest dividend was 9 per cent. in 1847, and its lowest 5 per cent. in 1850. Its average rate has been a trifle short of 7 per cent. In these days of disappointed hopes and ruined expectations, this is something to contemplate with satisfaction, even by those who do not share in its prosperity.

Memphis and Ohio Railroad.

At a meeting of the stockholders of this Company, held in Memphis on the 4th inst., the following gentlemen were re-elected Directors for the ensuing year: R. Topp, W. B. Miller, S. P. Walker, R. C. Brinkley, Q. C. Atkinson, A. Woodruff, F. Titus, of Memphis; John Pope and T. Crenshaw, of Shelby county; G. T. Taylor, of Tipton; Joseph B. Stanton and W. H. Loving, of Haywood, and B. C. Brown, of Henry County. The State Directors are Doctor Sol. Green and H. Tilghman, of this city.

At a subsequent meeting of the Directors, they unanimously elected R. Topp, President; J. T. Trezevant, Secretary and Treasurer; W. D. Pickett, Chief Engineer; and H. Coffin, Superintendent. Q. C. Atkinson, Esq., having resigned his

position as Director, William Jordan, Esq., of Gibson County, was elected in his place.

Fair of the Maryland Institute.

The annual exhibition of this very popular Institute is now being held at Baltimore. We learn that it has been eminently successful as far as regards the number of, and the purchase of regular membership tickets. The receipts are larger, according to the statement of J. S. SELBY, Esq., the actuary, than during the period of any previous exhibition, and it is estimated that this will continue to be the case during the continuance of the fair. Among the articles on exhibition is a large case filled with photographic cameras, and apparatus for the use of amateurs; also stereoscopes and views in large varieties, with other similar articles of value, from the well known mathematical and optical instrument manufactory of Messrs. F. W. & R. KING, of that city. The Fair is near its close, being in its second week. It is to be followed by the Agricultural Society's Exhibition. The Maryland Institute is the pride of Baltimore; and is well sustained by the prominent citizens of that place.

Overland Mail to the Pacific.

The arrival, on Saturday last, at St. Louis, from San Francisco, of the Overland California Mail, is another epoch in our country's history. Much credit is due Messrs. BUTTERFIELD & Co., the enterprising contractors, for their promptitude in the accomplishment of this great undertaking; and to the Administration, for the liberality and zeal with which it has encouraged the Company, much praise should be awarded. The Company have more than 200 stations on the road. We have before us the journal kept by Mr. BAILEY, an agent of the Post Office Department, giving the route taken, and also the distances between the different points, which we shall publish next week. The total distance, as given by Mr. Bailey, is 2,765 miles—time, 24 days, 20 hours, and 35 minutes: or, allowing 2 hours and 9 minutes for difference in longitude, leaves 24 days, 18 hours and 26 minutes. Mr. Bailey says that at least four days' time were lost on the trip, from causes which are not likely to occur again.

Finances of Virginia.

During the fiscal year ending the 30th ult., the receipts of the Treasurer of the State of Virginia, amounted (including a balance from previous year, of \$379,971 92) to the sum of \$9,518,907 98; and the disbursements to \$9,364,900 01—leaving a balance of \$154,007 97; of which, \$19,878 04 was to the credit of the State; \$44,729 84 to the credit of the Literary Fund; \$68,561 56 to the credit of the Sinking Fund; and \$20,838 53 to the credit of the Board of Public Works. The receipts on account of the latter during the year, (including balance from previous year of \$14,719 54,) was \$1,894,963 76, and the disbursements, \$1,874,125 23. The receipts on account of the State (including previous balance of \$37,124 81) were \$4,592,985 04, and the disbursements, \$4,573,107. On account of the Sinking Fund, (including balance of \$291,931 83,) \$2,645,930 25, and the disbursements, \$2,577,368 69. On account of the Literary Fund, (including balance of \$36,195 74,) \$385,028 93, and the disbursements, \$340,299 09.

Northern Pacific Railroad.—Navigability of the Columbia River.

In our issue of August 7th, we presented some facts in regard to the navigability of the Missouri river. We now propose to redeem the promise then made, of presenting similar facts in relation to the navigability of the great connecting and interlocking river, on the western slope of the continent, the Columbia.

The Columbia drains a vast extent of country from the Rocky range to the Pacific, situate between the parallels of 42° and 52° 30'. The main Columbia takes its rise in about parallel 50°, flows to the northward and making a large circular bend to the westward in about parallel 52° 30', finally takes a nearly due south course, till it reaches the parallel of 46° when it passes to the ocean in a nearly due west course, its mouth being in latitude 46° 15'.

Its principal tributaries are Lewis or Snake river, which flows through the southern portion of the country drained by the system of waters of which the Columbia is the main stem, and whose valley has furnished one of the great routes of travel from the Mississippi valley to the Pacific and which empties into the main river about latitude 46° 15'; and Clark's Fork which drains the central portion, and empties into the Columbia about parallel 49° 1'. Both these rivers have reaches of navigable water and deserve consideration in connection with the Columbia itself.

Besides these tributaries, are the Spokane which flows into the Columbia from the east and the Yakima, Wenatchapan and other streams which flow from the west. As these streams are not navigable, even in reaches of any length, except small portions of the upper waters of the Spokane, known as the Coeur d'Alene river and lake, further allusions to them will not be called for, except in reference to their facilities for rafting lumber in high water.

The Kootenay river, however, which has its rise in the Rocky Mountains, flows in a course nearly parallel to that of Clark's Fork and empties into the Columbia about 20 miles above the mouth of Clark's Fork, has, undoubtedly, considerable reaches of navigable waters; but as it is out of direction in regard to the streams draining the eastern slope of the Rocky Mountains, and is in connection with no overland route, it will not be considered further in this paper.

The main Columbia has for many years been navigated by boats and canoes from the Boat Encampment, near its source in the Rocky Mountains to the ocean, and reaches in Clark's Fork and the Snake river have been navigated in the same way. The navigation is obstructed by several rapids and falls, requiring portages even for canoes in the most favorable stage of water, and of other rapids requiring portages at low water. The journals of the officers and employees of the Hudson's Bay Company give much interesting information in regard to the difficulties and the danger and labor required to overcome them.

Our present purpose, however, is to consider its navigability for steamers, and we shall give facts in detail of the obstructions and facilities of the river as far as the Kettle Falls near Colville. We will commence at its mouth.

From the Columbia entrance up to the Cascades, a distance of 160 miles, the river is without ob-

struction, and can be navigated by large steamers. Sea-going steamers can ascend as far as Vancouver, 115 miles from its mouth. The Indians say that at the Cascades the river used to be perfectly free; but the gradual encroachments on its precipitous banks at length gave rise to a land slide, which falling into the river, made a sort of natural dam, which is evidently the case from the appearance of the shore. There is a portage around the Cascades of one mile and a-half. The next obstruction is at the Dalles, 205 miles from its mouth. At this place, the Columbia makes a bend like a horse shoe towards the South and runs through a basaltic trough with walls about twenty feet in height and two hundred yards apart, the current is very rapid, but is not rough. For canoes, a portage of eight hundred paces avoids this obstruction. For steamers, canaling for a considerably longer distance would be required. In the absence of careful surveys, we have not the means for stating the distance along which improvements must be made to furnish continuous navigation, or in the absence of such improvements the shortest land portage which would be required. The portage now in use is from the Dalles to the mouth of the Dechutes, a distance of ten miles. But this can unquestionably be very much reduced.

For the past two seasons, the army supplies for the Walla Walla post have been transported in sailing vessels from the mouth of the Dechutes river to old Fort Walla Walla and it is known that from that point to Priest's Rapids no obstruction exists. Snake river which flows into the Columbia forty-eight miles below Priest's Rapids is also navigable for a considerable distance, certainly to the mouth of the Pelouse 69 $\frac{1}{4}$ miles from its mouth and probably to its junction with the Clearwater. Lewis and Clark took canoes on the Kooskooskia, 59 miles above its junction with Snake river, and descended the Kooskooskia and the Snake to the junction of the latter with the Columbia, from the 7th to the 10th day of October, 1805, the river being at its lowest stage. Their course on the Kooskooskia was 59 miles, and on the Snake 139 $\frac{1}{2}$ miles. Comparing the difficulties they met with on the Snake, with those they encountered on the Columbia, from the mouth of the Snake to the Dalles, they seem to be all of the same general character, leaving but little or no doubt of the navigability of the Snake for steamers to the mouth of the Kooskooskia. Snake river is probably navigable for steamers 60 miles above the mouth of the Kooskooskia.

Besides Priest's Rapids, where canaling would be required, or a land postage of some three miles, the other obstructions are Buckland's Rapids, sixty-six miles above Priest's Rapids, Ross' Rapids, near the mouth of the Met-how River, and Kettle Falls. Ross' Rapids would not be an obstruction to steamers, but both at Buckland's Rapids and at Kettle Falls, locks and canals would be required, and especially at the Kettle Falls, where the Columbia pitches over a ledge of rocks making a fall of about fifteen feet perpendicular.

To Kettle Falls, a distance of about 725 miles from the ocean, the Columbia, in order to make continuous navigation, will therefore require locks and canaling at the Cascades, at the Dalles, at Priest's Rapids, and at Buckland's Rapids, giving the following reaches of navigable waters, viz.:

	Miles.
Entrance to Cascades	160
Cascades to Dalles	45
Dalles to Priest's Rapids	180
Priest's Rapids to Buckland's Rapids	66
Buckland's Rapids to Kettle Falls	274

It will be well to state that at high water steamers could probably ascend the whole distance from the Dalles to Kettle Falls, say from the middle of May to the middle of July.

Steamers have been running regularly in the two first mentioned reaches for some years, and a steamer was, at the last advices, being about put on the third reach. The business has increased quite rapidly—so much so that for three years there have been from Portland and Vancouver two lines of steamers to the Dalles, and the rates of freights and passages have become greatly reduced.

The annual freshet of the Columbia is caused by the melting of the snow in the Alpine regions of the Rocky, Bitter Root, and Cascade Mountains; and, as a consequence, takes place in the warm months of spring and early summer, commencing about the middle of April, and attaining its greatest height usually, and very regularly, by the fifteenth of June, at which time all the rapids from the Dalles to the Kettle Falls near Colville, are, so to speak, submerged.

The Clark's Fork empties into the Columbia by a fall of fifteen feet in height, and a hundred and fifty yards in width; at the distance of a quarter of a mile from the main stream it passes through a deep gorge in the range, where it has a further fall of three feet. From this point to the Mission of St. Ignatius, (seventy miles by the river,) it has never been explored. It is supposed to be navigable. The Indians are too indolent to travel for the sake of exploring, or for pastime; and as their hunting grounds lie in another direction, they have never made the attempt.

Dr. George Luckley, surgeon and naturalist for a Northern Pacific Railroad, who passed down from Fort Owen on the Bitter Root River, to its junction with the Flathead or Clark's Fork, and thence through Lake Pend d' Oreille to the Mission of St. Ignatius, above referred to, mentions in that distance only one portage of thirteen hundred paces, at the Cabinet, a few miles south of Lake Pend d' Oreille. He traversed this river in October and November, a period of the year when the water is at its lowest stage.

Dr. Luckley says in his official report of the exploration of this river to Gov. Stevens, that "at a point about sixty miles above the Pend d' Oreille Mission (of St. Ignatius) is the Pend d' Oreille or Kalispelm Lake, formed by a dilation of the river; it is a beautiful sheet of water about forty-five miles in length. Below it the river is sluggish and wide for some twenty-six miles, where rapids are again encountered during low water. From a point nine miles above the lake to these rapids, a distance of about eighty miles, steamboats drawing from twenty to twenty-four inches could readily ascend. In high water, of course, the distance would be lengthened. There would be but one obstacle between the Cabinet (twenty-five miles above Lake Pend d' Oreille) and a point ten miles below the Mission, a distance of one hundred and forty miles. The obstacle alluded to is where the river is divided by rocky islands, with a fall of six and a half feet on each side. At this

point a lock might readily be constructed. The Hudson Bay Company's large freight-boats are in the habit of ascending from the lower end of Pend d' Oreille Lake to the Horse Plains, a distance of about one hundred and thirty-five miles. This involves two portages. I have dwelt on these particulars, knowing how important they will prove in relation to questions of railroad construction, and the transportation of supplies. From the Horse Plains before spoken of, the river, so far as I have examined it, would be excellent for rafting purposes. Timber, in this manner, could be transported a great distance. Above this, to the St. Mary's village, I cannot give a decided opinion in its favor, but I am inclined to the opinion that rafts might be run; at any rate, logs could be readily driven down the current from an immense distance."

Dr. Luckley also observes as follows in regard to the main Columbia: "On the Columbia, between the mouths of the Snake and Dechutes rivers, a distance of about three hundred and fifty miles, there are but three obstacles to navigation for steamboats drawing from twenty to thirty inches. The principal of these are the Priest's and Buckland's Rapids. These might probably be locked, or so modified by art as to render them passable by steamboat or other craft."

Although wood does not grow on the immediate banks of the Columbia, from the Dalles to the mouth of the Wenatchapan, there will be no difficulty in rafting it down the river for the use of steamers; and indeed a good supply could be picked up from the drift which is found along the shore on the subsidence of the annual freshet. Above the mouth of the Wenatchapan, wood grows in large quantities; and the main Columbia is excellent for rafting purposes. Wood could also be rafted down the main Yakima to the Columbia during the season of the spring freshets.

Considering, therefore, that steamers have been for years running on the Columbia, as far as the Dalles, that one is about being put on from the Dalles to Fort Walla Walla, and that to get continuous navigation thence to Colville, improvements have only to be made at three points, viz: Priest's Rapids, Buckland's Rapids and Kettle Falls—the Columbia is entitled to the distinction of being a river navigable for steamers; and with the portions of Snake river and Clark's Fork, also navigable for steamers, we have a system of waters on our western water-shed having a comparatively short and easy land connection with the Missouri.

Looking to Snake river, we have, from Fort Benton, assumed as the head of steamboat navigation on the Missouri, (although steamers can ascend some miles farther, to the mouth of the Pelouse by the Coeur d'Alene trail,) a land transportation of 450 miles.

Looking to Clark's Fork and to Colville, we have from Fort Benton to the Horse Plain, a distance by a cut-off from the Blackfoot Fork to the Jocko river, a distance of 270 $\frac{1}{2}$ miles, and after passing down Clark's Fork, we have another land distance to Colville of sixty miles. The distance, however, from Fort Benton to Colville, via the Coeur d'Alene trail, is 480 miles.

Reserving, however, to a future occasion, a description of the several routes from the Missouri and the two branches of the Saskatchewan to the corresponding streams on the west, we will con-

clude this article by some remarks on the next considerable stream of the North-west, to wit Fraser River.

Fraser river is navigable to Fort Yale—a distance of 120 miles. Above this point, its navigation is extremely difficult, even for canoes; and no use whatever can be made of it for steamers. De Mofras' description of Fraser river agrees with that of all travellers in that country, and we give it in full.

"It takes its rise on the western slope of the Rocky Mountains, near the 55th degree, near the source of the Canoe river, the first important tributary of the Columbia. One of the principal sources of the Fraser is only about a thousand feet from the Unjiga, or Peace river, which is on the east of the mountains. Fraser river has a length of about one hundred and thirty leagues, almost parallel to that of the Oregon (Columbia); and receives nearly all the waters of New Caledonia (British Columbia)—the rivers Stuart, Chilcotin, Pinklitsa, Thompson and Quesnel.

In 1828, Sir George Simpson, Governor of the Territories of the Hudson's Bay Company, coming from Canada by way of the lakes, descended the whole of Fraser river; but found it full of dangerous rocks, rapids and high cascades, and consequently unfit for navigation. There is a bar at its mouth which can be crossed by vessels drawing twelve or fourteen feet of water; after which they can ascend some leagues to Fort Langley, built upon the left bank of the river about twenty-five miles from the sea. The soil on the lower part of Fraser river is fit for cultivation; has fine pastures and thick forests of birch, poplar, cedar, pines and other evergreens."

Thompson's river, one of the principal tributaries of Fraser river, is also worthless for purposes of navigation.

New York City Finances.

The semi-annual report of the Comptroller, extending from the 1st July, 1857, to the 30th June, 1858, was recently presented to the Board of Aldermen. The following is a summary of the annual taxation since 1850:

Tax levy for 1850	\$3,230,180	47
Do. 1851	2,924,384	99
Do. 1852	3,378,335	08
Do. 1853	5,069,650	05
Do. 1854	4,841,255	51
Do. 1855	5,843,822	89
Do. 1856	7,075,425	72
Do. 1857	8,066,566	52
Do. 1858	8,621,091	31

The total amount of the present city debt, not provided for, is \$11,047,052.

The proceeds of the Brick Church property, accruing to the city, are stated to have been \$67,500, which are applied to the sinking fund.

The following is the valuation of real and personal property, as compared with 1857:—

Real estate in 1858	\$368,346,296
Do. 1857	352,343,033

Increase of 1858.....\$16,003,263

Personal estate for 1858	\$162,847,994
Do. 1857	168,216,449

Decrease of 1858.....\$5,368,455

The gross amount of expenditures and receipts, during the year, are footed at \$14,038,750 17.

The report touches upon all matters of interest in regard to the finances of the city, and narrates the present position of such affairs. About most of these, previous statements have been, from time to time, published, embodying most of the information now given.

The Washington Aqueduct.

Captain Meigs has contracted with the Warsaw Foundry and Machine Company, of Phillipsburg, N. J., for a large portion of the pipe for the Washington Aqueduct.

General Statistics of West Indies.

Exhibiting the area, population, commerce, revenue, etc. of each government for the year 1855. Compiled from official and other authentic sources by RICHARD S. FISHER, Editor of Colton's Atlases, etc.

I. AREA AND POPULATION.

Governments.	Area sq. m.	Popu- lation.	Pop. to sq. m.
Hayti..... Empire	10,081	572,000	56.7
Dominica... Republic	17,609	136,700	7.7
Cuba..... Span. Col.	47,278	1,449,462	30.6
Porto Rico... do.	3,865	562,134	145.4
Bermudas... British Col.	20	11,092	554.6
Bahamas... do.	5,094	27,619	5.4
Turk's Isl'd* do.	430	4,428	10.3
Jamaica† do.	6,510	378,193	58.1
Trinidad... do.	2,020	68,645	33.9
Tobago... do.	144	13,208	91.7
Granada† do.	155	32,671	210.4
St. Vincent do.	132	30,128	228.3
Barbadoes... do.	166	135,939	818.9
St. Lucia... do.	296	24,516	82.8
Dominica... do.	274	22,061	80.5
Montserrat do.	47	7,653	162.9
Antigua... do.	108	37,757	349.6
St. Christ'ph'r do.	68	23,177	340.8
Nevis... do.	21	9,601	457.2
Barbuda † do.	72	1,707	23.7
Anguilla... do.	34	3,052	90.9
Virgin Isl'ds do.	92	6,689	72.7
Guadal'pe** French Col.	631	154,975	245.6
Martinique... do.	382	121,478	318.0
Curacao†† Dutch Col.	244	22,063	90.4
St. Eustatius do.	97	1,932	19.9
St. Martin†† and Saba... do.	28	4,502	160.8
St. Thomas... Danish Col.	27	13,666	506.1
Santa Cruz... do.	78	23,729	304.2
St. John... do.	22	2,228	101.3
St. Bartholom. Swed. Col.	25	9,000	360.0
Total.....	96,050	3,911,905	40.7

II. COMMERCE.

Governments.	Total Commerce.	Exports.	Imports.
Haiti.....	\$6,318,159	\$5,927,456	1,391,266
Dominica.....	1,827,362	31,394,578	6,073,870
Cuba.....	32,683,731	167,816	601,939
Porto Rico.....	5,761,975	347,510	659,974
Bermudas.....	167,816	4,661,580	2,017,609
Bahamas.....	347,510	1,904,364	2,795,334
Turk's Island }	4,661,580	248,769	261,534
Jamaica.....	2,017,609	691,986	562,051
Trinidad.....	1,904,364	883,984	728,863
Tobago.....	248,769	4,729,249	1,886,792
Grenada.....	691,986	276,932	481,393
St. Vincent.....	883,984	390,773	262,541
Barbadoes.....	4,729,249	72,574	44,814
St. Lucia.....	276,932	1,078,249	855,382
Dominica.....	390,773	665,444	539,826
Montserrat.....	72,574	163,974	104,667
Antigua.....	1,078,249	28,734	22,517
St. Christopher.....	665,444	5,097,687	5,113,926
Nevis.....	163,974	4,126,792	3,981,715
Anguilla.....	347,510	713,651	631,496
Virgin Islands.....	248,769	4,987,315	4,654,781
Guadaloupe.....	5,097,687	217,151	257,311
Martinique.....	4,126,792	\$78,045,761	\$71,251,635
Dutch West Indies.....	713,651		
Danish do.....	4,987,315		
Swedish do.....	217,151		
Total.....	\$78,045,761	\$71,251,635	

* Including the Caicos Islands.

† Including the Cayman Islands.

†† Including the Grenadines.

|| Belongs to the Codrington family, being the only British Colony remaining in private hands.

** Including its dependencies Marie-Galante, Desirade and the north part of St. Martin.

†† Including Bonaire, Aruba, etc.

†† South part of St. Martin only belongs to Holland. The whole island has an area of 33 square miles and 6,612 inhabitants.

III. COMMERCE WITH UNITED STATES.

Governments.	Exports from U. S.	Imports into U. S.
Haiti.....	\$2,081,338	\$2,474,487
Dominica.....	163,714	141,038
Cuba.....	8,004,582	18,625,339
Porto Rico.....	1,183,518	2,475,998
British West Indies... do.	5,021,143	1,518,670
French do.....	409,701	44,434
Dutch do.....	240,256	438,841
Danish do.....	888,464	225,308
Swedish do.....	69,247	32,229
Total.....	\$25,966,344	\$18,061,963

IV. ANNUAL REVENUE AND EXPENDITURES.

Governments.	Revenue.	Expenditures.
Haiti.....	\$1,136,800	\$1,308,040
Dominica.....	374,516	291,116
Cuba*.....	13,447,584	\$13,447,584
Porto Rico†.....	2,500,000	\$2,500,000
Bermudas.....	79,253	81,941
Bahamas.....	119,847	181,294
Jamaica.....	579,024	1,057,193
Trinidad.....	508,237	505,083
Tobago.....	40,070	40,070
Grenada.....	105,438	90,221
St. Vincent.....	101,237	104,266
Barbadoes.....	389,389	358,401
St. Lucia.....	79,652	81,578
Dominica.....	53,272	64,437
Montserrat.....	16,096	15,941
Antigua.....	127,892	122,035
St. Christopher.....	106,434	106,434
Nevis.....	21,262	21,102
Anguilla.....	With St. Christopher.	
Virgin Islands.....	11,734	11,734
Guadaloupe†.....	464,925	464,925
Martinique†.....	364,434	363,434
Dutch West Indies.....	96,196	186,821
Danish do.....	286,782	286,782
Swedish† do.....	\$22,600	\$22,600
Total.....	\$21,032,674	\$21,665,032

* Including surpluses sent to Spain.

† Estimated.

V. CAPITALS AND PRESENT GOVERNORS.

Governments.	Capitals.	Popul. of Capitals.	Present Governors.
Haiti.....	Port au Prince.....	12,000	Faustin I., Emperor.
Dominica.....	Santo Domingo.....	10,000	Pedro Santana, Prov. President.
Cuba.....	Habana.....	126,000	Jose de la Cacha, Capt. Gen.
Porto Rico.....	S. Juan Bautista.....	16,000	Gen. Campazana, C. G.
Bermudas.....	St. George's town.....	2,000	Freeman Murray, Gov.
Bahamas.....	Nassau.....	8,000	Ch. J. Bailey, Gov.
Turk's Island.....			W. R. Inglis, Pres. of Council.
Jamaica.....	Spanish town.....	6,000	C. H. Darling, Gov. Gen.
Trinidad.....	Puert. d'Espansa.....	12,000	Robert W. Keat, Gov.
Tobago.....	Scarboro.....	1,500	J. V. Drysdale, Lt. Gov.
Grenada.....	St. George's town.....	2,000	C. Kortright, Lt. Gov.
St. Vincent.....	Kingstown.....	5,000	K. T. Eyre, Lt. Gov.
Barbadoes.....	Bridgetown.....	22,000	Francis H. Cook, Gov.
St. Lucia.....	Castries.....	3,000	T. Brien, Lt. Gov.
Dominica.....	Roseau.....	5,000	H. St. G. Cr., Lt. Gov.
Montserrat.....	Plymouth.....	1,500	E. Rushworth, Pres't.
Antigua.....	St. John's.....	15,000	R. B. Hamilton, Gov.
St. Christopher.....	Base-Terre.....	8,000	H. G. R. Robinson, Lt. G.
Nevis.....	Charlestown.....	2,000	C. A. H. Rumbold, Pres. of Council.
Virgin Isl'ds, Tortola.....		3,000	T. Price, Pres. of Council.
Guadaloupe.....	Basce-Terre.....	4,000	P. V. Touchard, Gov.
Martinique.....	St. Pierre.....	6,000	Count de F. de Boucy, Governor.
Dutch Isl'ds, Wilhelmsstadt.....		8,000	R. F. v. Lansberge, Gov.
Danish do, Christianstadt.....		6,000	Jean F. Schlegel, Gov.
St. Barth'lm, La Carenage.....		1,000	

Wisconsin Central Railroad.

John E. Holmes has been elected President of the above road. The Jeffersonian says that now, from all appearances, the joint efforts of the company are about to be crowned with success, as a goodly portion of the road will be soon completed and in running order to Jefferson.

Land Grants Approved.

The Interior Department has approved to Florida, under the Congressional grant of May, 1856, over 183,000 acres of land in aid of the construction of the Florida and Atlantic and the Gulf Central Railroad, connecting Jacksonville and Alligator, sixty miles in length.

New York and Erie Railroad.OFFICE NEW YORK AND ERIE R. R. Co.,
NEW YORK, Sept. 28, 1858.

GENTLEMEN:—In answer to your inquiries as to the intentions of this Company in regard to the Second Mortgage Bonds which mature on the 1st March next, I beg to say that in the present state of the Company's finances and the general discredit of railroad securities, to reimburse them on that day is impossible. It appears to me, however, that the extraordinary security which these bonds offer to capitalists will render it no hardship to the holders to extend for a short time—say from five to ten years—the reimbursement of the principal, on condition that this company issue new sheets of coupons, and punctually meet them as they mature semi-annually.

The entire issue of 1st Mort. Bonds is..\$3,000,000
And of 2nd Mortgage Bonds is..... 4,000,000

Together.....\$7,000,000
secured by property which has cost, and, in my opinion, to day is well worth \$38,000,000, say over 5½ times the amount of the two mortgages. In the present state of the money market of the world, can a safer investment be found at par-paying 7 per cent per annum?

The Company, as you are well aware, has in reserve \$4,000,000 of Third Mortgage Bonds, pledged for the redemption of the Second Mortgage Bonds, after which redemption the Third Mortgage becomes Second Mortgage. The sacrifice which the negotiation of these Third Mortgage Bonds at present would entail on this company would be perfectly ruinous in its present embarrassed financial position, whereas, in my opinion, within the period named above, it will be easy for the company to extricate itself from all its difficulties, re-establish its credit, and thereby enable it to negotiate the Third Mortgage Bonds. To enable you to judge of the present and future financial position of the Company, I annex the following comparative statements of the floating debt of the New York and Erie Railroad Company:

	Sept. 30, 1857.	Mar. 30, 1858.	Aug. 30, 1858.
Bills payable	\$1,982,482	1,174,435	745,482
Accounts payable, including coupons past due, less cash and accounts receivable	342,934	421,504
Coups past due, and accounts payable and accts. receivable, not being made up.....	378,472

Total.....\$2,325,416 1,595,939 1,123,934

At no previous period have the unadjusted claims against this company been so small as at present. Supplies of every kind are now invariably purchased for cash, and claims properly adjusted and liquidated.

On the 1st August the Company had issued \$2,914,000 of the Fourth Mortgage Bonds, leaving therefore \$3,086,000 yet to be issued, which will produce \$1,543,000 in cash or in indebtedness of the Company, so that after paying every dollar of floating debt there would remain in the treasury in cash from the proceeds of the Fourth Mortgage Bonds \$419,000 applicable to the Tunnel and Long Dock, which is about the amount estimated to be required to bring that valuable addition to the property of the Company into use. Whenever the traffic of the Company is transferred to the Long Dock, it will not be long before \$2,000 per lot for the entire property will be considered a very moderate estimate, what would represent \$6,000,000, and then the surplus land, not needed by the company, could be probably sold for as much as the entire property and improvements will have cost.

The traffic of the Company for the present fiscal year ending Sept. 30, will not exceed \$5,250,000, in consequence of the commercial crisis and the competition between the four great lines, which fortunately is now terminated. Two years ago the gross receipts were \$6,350,000. Whenever the

traffic of the country resumes to ordinary activity, with fair rates of transportation, the revenue of the Company will undoubtedly reach again the above figures, and when the Long Dock can be brought into use, it must greatly exceed them. Had the Company this year been in receipt of the above amount, all its floating debt would now be liquidated, and the net revenue would hereafter be ample to provide for the interest on the entire debt, as well as the payments to the sinking fund, as will be seen by the following statement:

Gross revenue.....\$6,350,000
Expenses 60 per cent. (I am confident they can be reduced much below this as the road is in thorough condition, which it will be before long. The average expenses from 1852 to 1857, inclusive, have been 56½ per cent., the receipts varying from \$3,538,000 to \$6,350,000)..... 3,810,000

Interest 7 per cent. on \$28,000,000 amo't of debt after the entire issue of 4th Mtg. \$1,960,000
Sinking fund..... 420,000—2,380,000

Surplus.....\$160,000

After the experience of the past twelve months, I am more convinced than ever that no scheme to extricate the company from its financial embarrassments could be devised which would offer the same advantages to all the interests involved, as the one adopted by the company. To the holders of unsecured bonds it affords an opportunity to exchange them into Mortgage Bonds, offering perfect security even in the event of Company's property passing into the hands of receivers. To capitalists it offers at present rates of unsecured bonds, as undoubted investment yielding about 12 per cent. per annum, beside the certainty that as soon as the Company is extricated from its embarrassments, the market value of the investment will greatly add to their capital. To the company it insures relief without sacrifice, which is indispensable to its future welfare.

The road bed and equipment have been greatly improved during the past twelve months, and within another year will compare favorably with those of any other road in the United States, and the operating expense will be greatly reduced. If the balance of the Fourth Mortgage Bonds be at once taken, and the Second Mortgage Bonds extended for five or ten years, I have no doubt whatever as to the future prosperity of this company, as long as managed with economy and intelligence.

Believe me, gentlemen, respectfully yours,
CHARLES MORAN, President.

Railroad Earnings.

It is stated that the Hudson River Railroad, for the year ending September 30th, earned in gross about \$1,640,000, as against \$1,901,000 the previous year. The road was operated at an expense less by \$312,000 than the year before.

The following is a comparative statement of earnings of the Michigan Southern and Northern Indiana Railroad for July, August and September, in 1857 and 1858:

	1857.	1858.
Passengers	\$347,361 84	\$246,461 57
Freight	209,885 30	264,954 40
Mails, Express, etc..	23,575 98	63,234 12

Total.....\$585,823 12 \$574,650 08
Decrease in gross earnings.....\$11,173 03

The expenditures of the same periods were:—
1857.....\$453,434 71
1858..... 271,888 84

Showing a decrease in expenditures of \$181,545 87—Leaving for net earnings for three months \$302,761 25, or at the rate of about 7 per cent. on the entire debt and stock.

The business of the Illinois Central Railroad, for September, was as follows:

Land Department.

Acres Construction Lands
sold.....1,648.28 for \$20,979 73
Acres Interest Fund Lands
sold..... 160.00 for 3,836 80
Acres Free Lands sold... 671.78 for 11,236 14

Total sales during the month.....2,480.06 for \$36,052 67
To which add Town Lot sales..... 408 95

Total of all.....\$36,461 62

Acres sold since 1st Jan'y, 1858..... 43,820.53 for \$595,884 99
Acres sold prev'ly, 1,200,933.78 for 15,311,440 40

Total.....1,244,814.31 for \$15,907,825 39

Construction Bonds canceled in September, 1858.....\$48,500
Do. canceled previously.....757,000

Free Land Bonds canceled in September, 1858.....\$9,000
Do. canceled previously..... 98,000

Total Bonds canceled up to Sept. 30th, 1858.....\$912,500

Traffic Department.

Receipts from passengers.....\$82,582 11
Do. freight.....115,604 36
Do. mails..... 6,358 33
Do. rent of road..... 5,837 44
Do. other sources..... 1,767 45

Total receipts in September, 1858...\$212,149 69
Do. do. 1857... 238,925 88

Total receipts since 1st Jan'y, 1858...\$1,441,921 68
Total receipts in correspond'g period, of 1857..... 1,717,727 48

The September earnings of the Rock Island railroad were in—

1857.....\$197,011
1858..... 89,100

Decrease.....\$107,912

The earnings of the Cleveland and Toledo Railroad, for September, were.....\$83,400
Estimate expenses.....\$27,270
Interest..... 23,000
Rent..... 5,500

..... 85,770

Net earnings.....\$27,030

The earnings of the Norwich and Worcester railroad for the month of September, 1857 and 1858, were:

	1857.	1858.
Passengers	\$17,367	\$15,352
Freight	14,447	16,435

Decrease.....\$32,314 \$31,837

The following are the receipts on the Morris Canal for the week and season to 25th ult., as compared with corresponding time last year:

Total to September 25, 1857.....\$226,757 92
Week ending October 3, 1857..... 7,547 69

.....\$234,305 61

Total to Sept. 24, 1858...\$190,860 24
Week ending Oct. 2, '58.. 8,438 67

..... 199,298 91

Decrease in 1858.....\$35,000 70

The earnings of the Terre Haute, Alton and St. Louis Railroad Company, for the month of September, were:—

1858	\$79,458 82
1857	78,991 67

Increase\$461 65

The earnings of the Galena and Chicago Union Railroad Company, for September, as compared with last year, are as follows:

	1857.	1858.	Decrease.
Freight ...	\$170,021 62	\$106,924 33	\$63,096 79
Passengers	75,123 35	49,023 51	26,099 84
Mails, etc..	5,209 48	5,000 00	209 88

Total...\$250,354 45 \$160,948 84 \$89,406 11
Corrected earnings for the previous month, \$122,350 70.

The revenue of the Baltimore and Ohio Railroad, for September, was as follows:

	Pass'grs.	Freight.	Total.
Main Stem..	\$71,335.18	\$268,715.87	\$340,051.05
N. W. Va. ...	3,890.22	9,725.75	13,615.97
Wash. Br. ...	32,909.95	11,044.28	43,954.23

Totals...\$108,135.35 \$289,485.90 \$397,621.25

The revenue of the past month, as compared with the same period last year, is as follows:

	Main Stem.	N.W.Vir'g'a.
September, 1858...	\$340,051 05	\$13,615 97
Do. 1857....	402,231 11

Decrease\$62,180 07

	Wash.Br'ch.	Total.
September, 1858....	\$43,954 23	\$397,621 35
Do. 1857....	43,098 50	455,329 62

Increase\$855 73 Decr. \$57,708 27

The above table shows a decrease on the Main Stem of \$62,180 07, from which is to be deducted \$13,615 97 received on the Northwestern Virginia Branch, which leaves a decrease of \$48,564 10. There is an increase of \$855 72 on the Washington Branch, making a total decrease of the road, as compared with September of last year, of \$47,705 37.

The earnings of the Chicago, Burlington and Quincy Railroad in September, between Chicago and Burlington, a distance of 210 miles, were:—

Freight	\$94,511 86
Passengers	42,087 99
Mails and miscellaneous	2,150 83

Total.....\$138,750 68

The earnings of the Quincy and Chicago (late Northern Cross) Railroad, extending from its junction with the Chicago, Burlington and Quincy Railroad at Galesburg to Quincy, a distance of 100 miles, were:—

Freight	\$13,539 14
Passengers	9,836 90
Mail and miscellaneous	933 33

Total.....\$24,309 37

The first week in October on the Illinois Central shows \$46,930. The land sales were \$15,363, and the receipts for lands previously sold \$32,300.

WATER WORKS.

THE undersigned, many years Engineer of the Water Power Works at Fairmount, as well as of the several Steam Works supplying the City of Philadelphia with water, may be consulted upon the location, complete design, construction, and management of water-works of all kinds for the supply of cities, towns, etc., etc. Address

FREDERICK GRAFF,
Consulting Engineer, 137 Arch street,
PHILADELPHIA.

3m42

Railroad Iron.

2,000 TONS of Erie Pattern, Crawshays make, on sale. Apply to

3m40

JAMES TINKER,
64 Exchange Place.

OFFICE OF THE ILLINOIS CENTRAL R.R. Co.,
New York, October 2, 1858.
A FURTHER INSTALLMENT OF THIRTY-FIVE PER
CENT. on the outstanding obligations of this Company,
now over-due, will be paid on demand at No. 50 Wall st.
J. N. PERKINS.

RAILROAD SLEEPERS.

THE NEW BRUNSWICK & CANADA RAILWAY AND LAND COMPANY

HAVING received a Grant of wilderness land from the Crown, extending 5 miles in width on each side of their Line—65 miles of which are now open for traffic,—are enabled, from the peculiar advantages they possess, to supply

MOST SUPERIOR CEDAR AND HEMLOCK RAILWAY TIES

at a very considerable reduction on the usual cost. For particulars as to sizes, prices, etc., application may be made to

Messrs WILLIAMS & PAGE,

44 Water st, Boston, Mass.

Messrs A. BRIDGES & CO.,

64 Courtlandt st, New York,

Or at the office of the Company, St. Andrews, N. Brunswick

JULIUS THOMPSON,
Manager.

3m39

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL

IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
CUT NAILS AND SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854.

1y83

ST. LOUIS CAR WORKS.



S. B. LOWE & CO., PALM AND SECOND STREETS, ST. LOUIS, MO.

FOR SALE.

THE undersigned offer for sale the following valuable property in the city of Alexandria, Virginia.

An IRON FOUNDRY, with steam power, cupolas, cranes, flasks, and all the fixtures requisite for a first class business, also an extensive assortment of patterns for Railroad Machinery, Mill Gearing, Steam Engines, etc., etc.

The foundry building is of brick, fire-proof, well-lighted and has a clear floor 100 ft x 60 ft. Also, the square of ground on which the above is located, fronting on the Orange & Alexandria Railroad and containing about 84,600 square ft. of ground.

The position is a very favorable one for the transaction of an extensive foundry business and well worthy the attention of parties disposed to engage in that business.

Also for sale or lease their extensive LOCOMOTIVE, CAR BUILDING AND MACHINE WORKS in Alexandria, situated on the River Potomac, comprising Real Estate, Buildings and Machinery for the transaction of a large machine business of any kind.

The location is considered a most desirable one, being immediately on deep navigable water and in a city from which three important railroads diverge, one of which connects with a line of roads terminating at New Orleans, with diverging lines from the South and South West.

The subscribers will sell or lease this property or they will work it in connection with parties who are disposed to invest capital to purchase an interest with them. It is not deemed necessary to give an extended description of the property, as parties disposed to negotiate will probably examine for themselves.

For terms, etc., apply to

3m35

SMITH & PERKINS,
Alexandria, Va.

G. M. TRACY & CO., STOCKS, BONDS, ETC. LOANS NEGOTIATED.

No. 49 EXCHANGE PLACE,
NEW YORK.

CHAS. A. FISHER,

Late of the firm of FISHER, DENNY & CO.,

No. 18 Exchange Place.

STOCKS and Bonds bought and sold on commission. Loans negotiated.

PETERS, CAMPBELL & CO., BANKERS AND DEALERS IN DOMESTIC EXCHANGE AND BANK NOTES, No. 50 WALL STREET, NEW YORK.

SPECIAL ATTENTION GIVEN TO
COLLECTIONS
IN ALL PARTS OF THE UNITED STATES.

PETERS, SPENCE & CO., Lynchburg, Va.

D. T. C. PETERS, } DAVID E. SPENCE,
N. H. CAMPBELL, } DEXTER OTEY.

REFER TO
JAS. T. SOUTHER, Esq., Pres't of Republic, } New York City
American Exchange Bank, }
Banks and Bankers, Richmond and Lynchburg, Va.

KETCHAM & WILLIAMS, STOCK BROKERS,

No. 1. HANOVER STREET,
Near Wall, NEW YORK.

Stocks and Bonds bought and sold on Commission, and
Loans negotiated. 6m9

DUNCAN, SHERMAN & CO., BANKERS,

Corner Pine and Nassau Sts., NEW YORK,

CIRCULAR NOTES AND LETTERS OF CREDIT,
For travelers, available in all the principal cities of the world.
ALSO, MERCANTILE CREDITS,
For use in EUROPE, CHINA, etc.

SIMEON DRAPER, Auctioneer.

By SIMEON DRAPER,
Office, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES
AT THE MERCHANTS' EXCHANGE EVERY DAY.

STOCKS and BONDS bought and sold at private sale.
Sale every day at 12½ o'clock. See Catalogue.

H MEIGS, Jr. & SMITH,
BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)

STOCKS and BONDS Bought and Sold on Commission,
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, JR. WM. ALEX. SMITH.
New York, May 11, 1858.

INTERNATIONAL BRIDGE NOTICE.

THE undersigned Committee of the Common Council of the city of Buffalo, appointed to obtain information, and to hear and receive propositions relative to the interests of the city, in regard to the proposed International Bridge, and report the facts so ascertained, and the propositions received by them, hereby invite engineers and contractors to submit at an early day, plans and estimates for the construction of the International Bridge over the Niagara River at Buffalo.

A survey and cross-sections of the river can be seen at the office of WILLIAM S. SMITH, Civil Engineer, in Brown's Building, corner of Main and Seneca streets, Buffalo, or cross-sections of the River will be furnished by him on application.

Plans should be accompanied with full explanations and detailed estimates of the cost of the work, including approaches of carriage way and foot-paths, and the Railway ready for approaches.

J. B. DUBOIS,
HARRY MILLER,
H. P. CLINTON,
H. A. CHAMBERLAIN,
THOMAS TRUMAN,
J. H. BIDWELL,
D. DEVENING.

1m41

RADLEY & HUNTER'S IMPROVED SPARK ARRESTER



RADLEY & HUNTER'S celebrated new invention is now offered to the public as a *Perfect Spark Arrester*, which possesses the advantage over all others of being of the most simple construction, and much more durable than any ever used. The manufacturer invites an examination of this Arrester by the railroad public, confident that it will meet with universal approbation.

The undersigned hereby gives public notice that he is the sole manufacturer of the above article under the Radley & Hunter Patent, of whom alone they can be purchased in the United States.

EDWIN R. BENNET,
Office 22 Duane st., New York.

RAILROAD IRON AND EQUIPMENTS. T.A. HOWLAND & CO. 54 WILLIAM ST.,

HAVING the advantage of the most favorable arrangements with both Foreign and American Manufacturers are prepared to supply Railroad Companies with IRON and ROLLING STOCK on the most favorable terms, and also to Negotiate their Securities.

THE ROUGH AND READY ROLLING MILLS OF DANVILLE, PA.,

ARE prepared to fill orders for RAILS of the best quality at the market price.

T. A. HOWLAND & CO., Agents,
54 William st., NEW YORK.

RAILROAD IRON. THE RENSSELAER IRON COMPANY, TROY, N. Y.,

OFFER RAILS of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS
received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:
BUSSING, CROCKER & DODGE,
32 CHURCH ST.

IRON BOILER FLUES.

Lap-Welded Boiler Flues,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1831.
Warehouse—209 South Third st.,
PHILADELPHIA.
STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR. STEPHEN P. M. TASKER.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.
MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
Agents for the United States,
12 SOUTH CHARLES STREET,
BALTIMORE.

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only sixteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited
From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to
ALBERT G. SMITH,
President of the Incorporation.
February, 1855.

RAILROAD IRON. The Crescent Manufacturing Company, WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address
N. WILKINSON, Sec'y,
WHEELING, VA.

RAILROAD IRON.
CONTRACTS FOR RAILS,
AT A FIXED PRICE OR ON COMMISSION,
DELIVERED AT AN ENGLISH PORT,
Or at a Port in United States,
WILL BE MADE BY THE UNDERSIGNED,
THEODORE DEHON,
10 Wall st., near Broadway, New York.
500 tons T rails on hand 54 to 57 lbs. per linear yard.

RAILROAD IRON.
The undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES, ARE PREPARED TO CONTRACT FOR DELIVERY On board ship at Liverpool, or Welsh port.
G. CONGREVE & SON,
13 CHURCH ST., N. Y.

RAILROAD IRON.
The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER Free on Board at Shipping Ports in England, or At Ports of Discharge in the United States, RAILS OF SUPERIOR QUALITY, And of Weight or Pattern as may be required.
VOSE, LIVINGSTON & CO.,
New York, Aug. 1, 1855. 9 South William Street.

RAILROAD IRON.
The Subscribers, Agents for the Manufacturers, ARE PREPARED TO CONTRACT FOR THE DELIVERY OF RAILROAD IRON AT ANY PORT in the United States or Canada, or at a shipping port in Wales.
WAINWRIGHT & TAPPAN,
Boston, June, 1851. 29 Central Wharf.

**RAILROAD IRON AND
COMMON BARS.**
THE UNDERSIGNED,
Sole Agents to Messrs. GUEST & CO.,
The Proprietors of the Down's Iron Works,
Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.
R. & J. MAXIN, 70 Broad st.

**RAILROAD IRON
AT ELMIRA, N. Y.**
THE subscribers have American Railroad Iron for sale as above; also Welsh Iron in New York and other markets.
FABER, PERKINS & CO.,
Brokers, 69 Wall st.
New York, August 10th. 6m33

RAILROAD IRON. WOOD, MORRELL & CO.,

Having leased the extensive Works of the Cambria Iron Company,
Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,
ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.
Philadelphia Office, North Penna. R. R. Building,
No. 407 Walnut st.

STEEL, FILES, &c. R. GROVES & SONS, SHEFFIELD, ENGLAND,

MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.
A stock of the above goods constantly on hand.

CORPORATE MARK
USE
CHAS. CONGREVE & SON, Agents,
13 CHURCH ST., N. Y.

RAILROAD IRON.
WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.
NORRIS & BROTHER,
BALTIMORE.
6m35

REMOVAL.
W. D. STARLING, Metal Procter and Rail Inspector, from Lawrence Pountney Lane, to the Vestry House, Lawrence, Pountney Hill, LONDON, 1857.

Railroad Iron.
700 TONS, aloft, or in store, of "W. Crawshaw's" make. For sale by
THEODORE DEHON,
10 Wall st., near Broadway, NEW YORK.
18

Railroad Iron.
1,000 TONS Railroad Iron, weighing about 58 lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
VOSE, LIVINGSTON & CO.,
August 1st, 1857. 9 South William st.

TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:—
The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater,
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.
The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.
Reference is made to the officers of all the railroads in the vicinity of Cincinnati.
Additional particulars and circulars may be had by addressing
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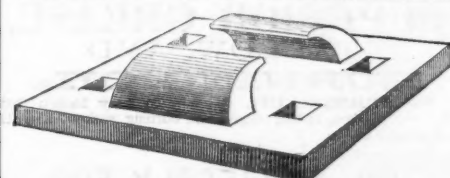
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 Also a variety of CITY, COUNTY, and RAILWAY
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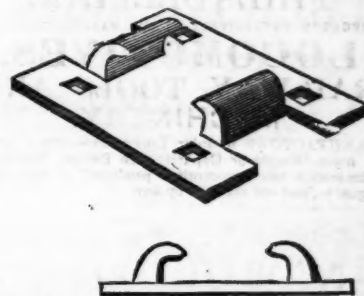
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 bend, where the greatest strength is required, and diminishes
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We invite the attention of parties wishing the best Wrought
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The Chairs weigh from seven and a-half to fifteen pounds,
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Our manufacture of Chairs are used on a large number of
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BRASS and **IRON CASTINGS**; **LOCOMOTIVE TYRES** welded and blocked to exact sizes, and every thing connected with the building or repairing of Locomotives furnished on short notice.

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DANFORTH, COOK & CO.,
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HAVING erected an extensive Shop, with the most approved Machinery and Tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various Tools suitable for furnishing Repair Shops.

The business of Machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1749

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Iron Founders and General Machinists,**

ARE prepared to fill at short notice and of best materials and workmanship, orders for

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PLATE CAR WHEELS and **CHILLED TYRES**, equal to any produced in the country.

WHEELS AND AXLES fitted for use.
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MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

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Cylinders, 16x24 157 Flues, 1 1/2 x 11 ft. 7 in.

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by large numbers of certificates of the best managed lines of Railroads, Steamships, Machine Shops, & Factories in this country, testifying to its value as being greatly superior to any other. Most of the certificates being of prominent Companies, it is probable that more or less of them will be known to all. We have also the MEDALS and DIPLOMAS awarded to us by the AMERICAN INSTITUTE.

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**SUPERIOR GREASE,
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The BURNING OIL will burn in any lamp that will burn Sperm, lasting longer, and burning without smell or smoke.

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**OIL EXPRESSLY FOR
SEWING MACHINES,
GREATLY SUPERIOR TO ANY OTHER,
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